

# Research on the Competitiveness Improvement of China's White Appliance Industry

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## Abstract

**China's white appliance industry started late, but it is developing rapidly. In the decades of opening up to the outside world, China has formed a number of white goods enterprises with production, research and development and sales capabilities. As the industry as a whole enters a mature period, the white goods market has seen some new changes, such as: the industry sales volume is basically stable, the industry has entered the stage of stock competition, the distribution of enterprises is concentrated, the average price of products has risen as a whole, the trend of high-end products is becoming more and more obvious, and the main sales channels have changed from offline to online. Under these new forms, enterprises must make some new strategic adjustments to occupy the increasingly fierce domestic and international markets. This paper analyzes the current market situation and puts forward policy suggestions for white goods enterprises such as innovation-driven acceleration of corporate strategic transformation, enhancement of brand competitiveness, building ecological brands, and diversified operation of enterprises.**

## Keywords

**White Appliance; Problem and Actuality; Boost Recommendations.**

## 1. Introduction

Since the reform and opening up, China's home appliance industry has made remarkable achievements, and in just 30 years, China has become a global home appliance producer and consumer. With the rise in human resource prices, the shortage of raw materials, fierce industry competition and other factors are increasingly apparent, the home appliance industry has entered the era of low profits, the integration and reorganization of enterprises tend to be active, and a number of large-scale home appliance enterprises led by Midea and Haier have been born, their management structure design is more scientific, production equipment is more advanced, so the production efficiency of the whole industry is increasing. Since the spread of the globalization of the epidemic in 2019, under the background of the surge of anti-globalization ideas, the sharp rise in international freight costs, the tight supply of raw materials, and the sharp changes in the international exchange rate, China's home appliance industry has generally maintained a steady upward trend, but the process is difficult. According to data released by the General Administration of Customs, the annual export volume of China's home appliance industry in 2021 was 98.72 billion US dollars (including white goods), an increase of 22.3% year-on-year, while China's major appliances, small household appliances export volume and export growth rate continued to decline, especially in the export of major appliances. For consumers, traditional types of home appliances such as refrigerators, air conditioners, and washing machines are highly saturated; Health appliances such as disinfection cabinets and sweeping robots are not just needed, and the market is difficult to develop, superimposed on the impact of the epidemic on real estate completion, decoration and real estate delivery, and the market demand for home appliances has shrunk sharply.

The China Home Appliance Association pointed out in the "14th Five-Year Plan Development Guiding Opinions of China's Home Appliance Industry" that in the 14th Five-Year Plan, China's home appliances should continue to enhance the global competitiveness, innovation and influence of the industry, and become a leader in global home appliance technology innovation by 2025. The latest data shows that at present, the export volume of China's white goods industry is the international leading level, but due to the late start of China's home appliance industry, the entire industry has unbalanced and insufficient development problems in terms of enterprise development, industrial chain development, and global influence. In general, although China has become a white goods power in the global market, the dilemma that China's white goods companies have little international influence in overseas markets still exists. Under the influence of a variety of unfavorable factors, how to enhance the international competitiveness of China's white goods industry is particularly important.

## **2. Analysis of the Current Situation and Existing Problems of the White Appliance Industry**

### **2.1. The White Electricity Industry has Entered a Mature Period**

The industry has entered a mature period mainly reflected in three aspects. 1.Slowdown in technological innovation: White goods technology has been relatively mature, and with the exception of a few products, the functionality and performance of most products have stabilized. Future product innovation mainly lies in improving product design, intelligence, user experience and other aspects. 2.The industrial chain has been relatively complete: the industrial chain of white goods has been relatively mature, and the links such as production, sales, and after-sales service have been relatively perfect. The ability of enterprises to control and integrate the industrial chain has become one of the competitive advantages. 3.Relatively fierce market competition: Due to the relatively mature market scale, the slowdown in market growth rate, and the increasingly fierce competition between enterprises, enterprises need to invest more human, financial, material resources and other resources in order to gain advantages in the fierce market competition.

White electricity has entered the stage of stock competition, and sales are generally stable.

China's white electricity industry has entered the stock market and entered a period of stable growth. According to data from the National Bureau of Statistics, from 2012 to 2021, the production of white goods represented by refrigerators, air conditioners and washing machines in China showed a fluctuating upward trend, and in 2022, due to many adverse factors such as the epidemic, the production of white goods fell slightly. With the increase in ownership and base, the growth rate of the three major white electricity sales has slowed down in recent years, entering the stock competitive market, domestic sales have stabilized, the supply chain has been blocked by the outbreak of the epidemic in 20 years, and the real estate has continued to weaken in the past 22 years, coupled with weak terminal demand, and the shipment side has come under pressure.

### **2.2. The Distribution of Enterprises is Concentrated, Mostly Located in Guangdong and Jiangsu and Zhejiang Regions**

Midea Group, Gree Electric Appliances, Hisense Home Appliances, TCL, Skyworth Group and other leading enterprises in the white goods industry are located in Guangdong, and the development of white goods industry in Guangdong Province is in a dominant position in the country. Sanhua Intelligent Control, DunAn Environment, Boss Appliances, Ningbo Fangtai and other enterprises are located in Zhejiang Province, with strong industrial chain cooperation capabilities. Xiaotian, Dongfang Electric Appliance, Jiangsu Rayleigh and other enterprises are

located in Jiangsu Province, which also have certain advantages in the coordinated development of the industrial chain.

### **2.3. The Average Price of White Goods is Generally in the Upward Range**

Copper and aluminum are one of the most important raw materials indispensable in the production of white goods, and are often used to make key components such as wires and motors. Due to the rise in the price of bulk raw materials, leading white power enterprises passed on the upward pressure through terminal price increases, pushing up the average price of the domestic air conditioning industry to continue to rise. In 2021, the average prices of domestic air conditioning, refrigerator and washing machine industries will be 3257 yuan, 3046 yuan and 2060 yuan respectively, up .2%, 10.2% and 6.4% year-on-year.

### **2.4. The High-end Trend of White Electricity Products is Obvious**

The high-end of home appliances mainly involves technological upgrading, appearance and aesthetic improvement and refined polishing of products. At the current stage, the trend of high-end white electricity is more obvious, and many manufacturers continue to iteratively upgrade around related products. All kinds of high-end home appliances tend to adopt the latest brand technology, optimize the essential functions of the product while tapping new user needs, so as to provide high-end users with the ultimate product experience. On the other hand, in addition to continuously improving the traditional refrigeration, freshness preservation and laundry functions, white electricity enterprises also continue to meet the various needs of customers in health, smart technology and home design through technological innovation.

### **2.5. Online Channel Sales Turned Around Steadily, While the Decline Narrowed**

In 2022, the distribution and installation of domestic large electric terminals will be blocked, offline passenger flow will decrease, and the sales performance of air conditioning terminals will be weak. According to data from Oviyun.com, in 2022, online sales of air conditioners decreased by 1.5% year-on-year, and offline sales decreased by 27.4% year-on-year. In Q1 2023, online sales of air conditioners increased by 15% year-on-year; Offline sales decreased by 15.1% year-on-year, narrowing the decline. Sales of other white appliances such as refrigerators and washing machines are about the same as those of air conditioners.

### **2.6. The Patent Quality Is Low**

Under the influence of many factors such as the encouragement of national policies and the increasingly fierce competition in the same industry, in recent years, the number of patents of China's white goods enterprises has made a qualitative leap, but on the other hand, the patent quality of China's white goods enterprises still needs to be improved. Taking Midea, Haier, Gree and Hisense home appliances, the leading enterprises in China's white appliance industry, as an example, in the past three years, the proportion of important patents (citations greater than 5) and PCT patents of enterprises has been 3.6% and 7.9%, of which Hisense Home Appliances and Haier Zhijia are listed as the first in the industry respectively. However, this proportion is still lower than international well-known home appliance brands such as Panasonic, Hitachi, LG and Bosch.

## **3. Advice on Improving Competitiveness**

### **3.1. Driven by Innovation, Accelerate the Strategic Transformation of Enterprises**

China's white goods industry began from the international brand of parts processing, assembly production, through several years of vigorous development, Chinese enterprises in technology from simple import and imitation to independent production design leap, and gradually

established a more complete R & D and production system. The innovation and R&D strength of some leading enterprises have exceeded or reached the leading level of foreign countries. China's white goods enterprise products can enter the consumer market of developed countries in Europe and the United States and maintain a place, innovation and the improvement of the technical content and quality level of goods caused by it is an important way.

From the perspective of the external development environment, the white appliance industry product demand declined, overcapacity, homogenization phenomenon is significant, industry competition is gradually fierce, with the improvement of consumption brought about by quality consumption, home appliance manufacturing enterprises urgently need to change the development mode, to achieve the transformation and upgrading from scale efficiency to quality benefit enterprises. The extensive growth of large-scale production and low-cost distribution has become unsustainable, and the low-end product structure has led to bottlenecks in the improvement of brand power and profitability of some enterprises, and strategic transformation has become imperative. Therefore, enterprises should shift from cost-leading economies of scale to differentiated competitive advantages and quality-benefit development, and embark on the path of innovation-driven high-quality development.

### **3.2. Enhance Brand Competitiveness and Build Ecological Brands**

Many white household appliance companies in China have basically realized the necessity of famous brand management and brand strategy for the development of the market with fierce international competition, with the development and expansion of China's white goods brand in China, especially the establishment of global brand awareness of some household appliance companies, some strong household appliance companies adopt overseas factories, continue to create brands in the international and other methods, completed the transformation from export commodity foreign exchange to export commodity branding, the pace of brand globalization is accelerating. On the one hand, China's white power enterprises should pay attention to enhancing brand stickiness, providing membership services, gaining the trust of users, and pushing effective information more accurately when pushing products and promotional activities. On the other hand, enterprises should convey core values through brands, and core values are the soul of the brand and the characteristics that distinguish them from other products. Words that make customers think of a brand, such as high-end, low-key, innovative, high-value, cost-effective, high-quality, full category, etc. The core value transmission of a brand is a long-term accumulation, which is a powerful chip to improve the brand's premium ability and the core of enhancing brand loyalty.

### **3.3. Diversified Operation of Enterprises to Create Diversified Strategies**

At present, in the context of the gradual saturation of the white goods market, the main motivation of consumers to buy white goods has changed from scratch to replacing the old with the new. On the other hand, people are also paying more and more attention to user experience, and the trend of smart home has created more profit margins for enterprises. Therefore, enterprises should actively develop a diversified strategy, grasp the market trend, broaden product categories, develop more enterprise flagship products, and diversify the business risks brought by a single product.

### **3.4. Further Expand Sales Channels and Make Online Transactions More Convenient**

Current data shows that the main channel of white goods sales has shifted from offline to online, and the gap between the two is still expanding. With the rise of e-commerce and online channels, white goods companies need to integrate offline and online channels, coordinate local logistics resources, strengthen the quality control of shipped goods, make the quality of goods sold

online more guaranteed, prices more affordable, logistics faster, and further enhance consumers' online shopping experience.

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