

China's Export-Oriented Home Appliance Industry

I. Background—20 years of tremendous changes of China's home appliance industry

The production of home appliance production concentrates in North America, Asia and West Europe. 83% of the world's home appliances are produced in the above three regions. Wherein, 80% of the output of North American concentrates in the USA and the US-Mexican border. Italy is the center of home appliance production in Europe. East Europe is rising thanks to its cheap labor costs and vicinity to the western European market. Thanks to its cheap labor and huge potentials, Asia will become the world's large home appliance production base in the 21st century.

China's home appliance industry enjoys huge advantages due to its large potential market demand, plentiful, cheap and experienced labors and a complete set of spare parts supply system. After over 20 years of reform and opening, China's home appliance industry is becoming one of the world's home appliance production bases. It is now a mature industry with a total market value of over \$300 billion. Now, the output of air-conditioners and air-conditioner compressors in China has exceeded 30 million; the output of washing machines and rice cookers has exceeded 20 million; and the output of electric fans and other small home appliances is approaching or has exceeded 100 million. The outputs of the above home appliances in China now rank the first in the world. At the same time, China's home appliance industry becomes increasingly concentrated. In 2003, Haier, Kelong, Meiling and Xifei produced 50% of the refrigerators in China and the percentage was only 30% 10 years ago. The top three brands usually occupy over 50% of the shares of markets with comparatively smaller sizes, such as microwave ovens, soya-milk machines and dish washers. The markets where 36%-50% of the shares concentrate in a few large producers include color TVs, refrigerators, washing machines, fans and rice cookers. The home appliance industry is becoming one of the most competitive and advantageous industries of China in the world.

When rapid changes have taken place in the production of home appliances, China's export

of home appliances also rose substantially. From 1995 to 2004, China's export of home appliances rose from \$3.33 billion to \$17.49 billion, up by 25.1% per year in average. Meanwhile, growth rate of China's import and export was only 16.6%. The percentage of home appliances in export rose from 1.57% to 2.95%. In 2004, China's export volumes of major home appliances rose substantially. The export volumes of microwave ovens, air-conditioners, refrigerators and washing machines rose by 18.4%, 42%, 40% and 73% respectively. The export volumes of other small home appliances also underwent two-digit growth.

The rapid growth of the home appliance industry not only promoted the growth of China's GDP, but also brought huge tax revenues to the places of production so that local governments could have more resources to provide public goods. Besides, since the home appliance industry is labor-intensive instead of technology-intensive, the growth of China's home appliance industry has created more job opportunities and absorbed a huge number of surplus labors from rural areas and less experienced workers in cities. For in stance, Haier achieved a global sales amount of RMB71.1 billion and created over 300,000 jobs in 2002. Its total number of employees was 250 times than that of 1984¹. In 2005, the net annual income per capita of Chinese farmers was only RMB3,000, but the average salary of labors from rural areas working in Guangdong was RMB1,045/month². The salaries in different regions and the salaries of employees that have received different trainings differed vastly. The salaries of migrant workers in the Yangtze River Delta and the Pearl River Delta where home appliance producers concentrate and the salaries of migrant workers who have received technical trainings are obviously higher than the national average.

We will analyze the trade of China's home appliance industry and its impact on regional economic development and the reduction of impoverished population on the basis of the study on the Pearl River Delta and the Yangtze River Delta, the two largest production bases of China's home appliance industry.

¹ "Successful case--Haier", http://www.vitnew.com/success_story/haier.html

² <http://www.labournet.com.cn>

II. Home appliance industry in the Yangtze River Delta and the Pearl River Delta

2.1. Profiles of the two deltas

Yangtze River Delta Economic Zone (hereinafter referred to as Yangtze River Delta) refers to the region made up of 16 region-level cities in Shanghai, Jiangsu and Zhejiang. The zone includes Shanghai, Nanjing, Suzhou, Wuxi, Changzhou, Zhenjiang, Nantong, Yangzhou and Taizhou of Jiangsu Province and Hangzhou, Ningbo, Jiaxing, Huzhou, Shaoxing, Zhoushan and Taizhou of Zhejiang Province. In 2004, the Yangtze River Delta covers a total area of 109,600km² and had a population of 82,121,200, accounting 1.1% and 6.3% of the national totals respectively.

Pearl River Delta Economic Zone (hereinafter referred to as Pearl River Delta) refers to the 14 cities, counties and districts in the Pearl River valley of Guangdong Province. It includes seven cities of Guangzhou, Shenzhen, Zhuhai, Foshan, Jiangmen, Dongguan and Zhongshan, three counties of Huiyang, Huidong and Boluo, the urban area of Zhaoqing and the two county-level cities of Gaoyao and Sihui. It covers a total area of 41,500m² and has a population of 24,513,600, accounting for 0.4% and 1.9% of the national totals respectively.

After the reform and opening, the above two regions first opened to the outside world as special economic zones thanks to their geographic advantages. Afterwards, the two regions benefited earliest and most from a series of opening measures and favorable policies. After nearly 30 years of opening and development, Yangtze River Delta and Pearl River Delta gradually become the regions where the economies are the most vigorous and the economic growth is the fastest. In 2004, the GDP of the two deltas reached RMB4,216.9 billion, accounting for 30.8% of the national GDP (RMB13,687.6 billion), up by 5.9 percentage points from the 24.9% in 2000. The GDP per capita of the two deltas amounted to RMB39,546 or 3.7 times than the national GDP per capita (RMB10,561). In 2000, the GDP per capita of the two deltas was RMB21,545 or 3.0 times than the national GDP per capita (RMB7,086). The gap between the average GDP per capita of the two deltas and that of the nation continued to widen. In terms of industrial structure, the portfolios of the three industries in Yangtze River Delta and Pearl River Delta in 2004 were 4.6:55.9:39.6 and 3.8:53.8:42.4. The percentages of the second industry in the two regions were roughly the same as the national average. The percentages of the first industry were approximately

11 percentage points lower than the national average. The percentages of the tertiary industry were about nine percentage points higher than the national average. So, the industrial structures of the two regions were better than that of the whole country. From 1990 to 2004, the industrial portfolios of the two regions underwent big changes: the portions of the first industry in GDP declined substantially and the portions of the tertiary industry in GDP rose dramatically. The proportion of the first industry declined most in Yangtze River Delta, from 15.8% to 4.6%, down by 11.2 percentage points. The portion of the tertiary industry rose most rapidly also in Yangtze River Delta, from 27.2% to 39.6%, up by 12.4 percentage points.

In the same year, the import and export amount of the two regions reached \$743.01 billion, accounting for 64.4% of the total import and export of the nation and up by 6.5 percentage points from the 57.9% of 2000. In the same year, foreign direct investment (FDI) in the two regions totaled \$31 billion, up by 37.9% from that of 2000 and accounting for 51.1% of the total FDI of the nation. With the rapid economic growth, the living standards also improved. In 2004, the urban household disposable income per capita in Yangtze River Delta and Pearl River Delta was RMB15,361, 1.6 times than the urban household disposable income per capita of the country.³

2.2 Shunde District in the Pearl River Delta and its home appliance industry

The Pearl River Delta is the origin of China's home appliance industry. Let's take Shunde District of Foshan City at the center of the Pearl River Delta as an example. Despite its small area of only 806km², it is the world's largest fan, rice cooker and microwave oven supply base. It is known as "the Kingdom of Home Appliances" and "Capital of Home Appliances". It has four home appliance listed companies of Midea, Kelong, Macro and Kodak. Shunde ranked No.1 among the top 100 county-level economies announced by the National Statistics Bureau in the four consecutive years from 2000 to 2003. Its computers and computer accessories, microwave ovens, containers, air-conditioners, electric boilers and electric fans are exported to over 100

³ The data are all derived from "2005 Research on the Economic Development of Yangtze River Delta and Pearl River Delta", (Yang Jingying, Wang Qiang, Ren Xiaoyan), National Bureau of Statistics of China, <http://www.cnfol.com>.

countries and regions in the world. 10 enterprises exported over \$100 million of goods in Shunde District by the end of 2004. These leading enterprises and enterprises with foreign investment are the major forces of export in Shunde, but small and medium-sized private enterprises gradually become the fastest growing entities in the export of Shunde. Besides, although Shunde is only a county-level district, it has attracted huge amount of foreign investment and 25 Top 500 companies have settled in Shunde.

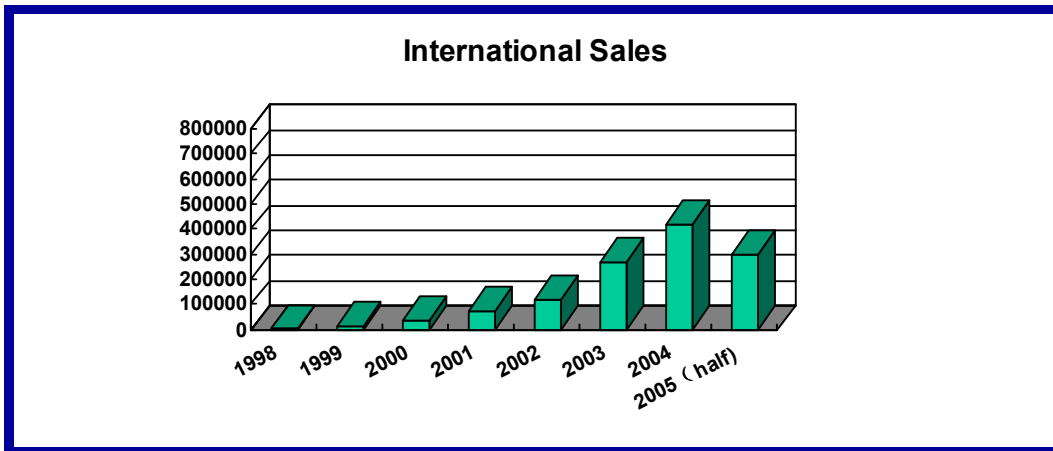
Before the reform and opening, Guangdong economy was under the national average level. Its growth rate had been below the national average for 14 consecutive years before 1979. In 1979, the industrial and agricultural output per capita of Guangdong was RMB523, 17.8% less than the national average of RMB636.⁴ However, in 2004, the industrial and agricultural output per capita of Guangdong was much higher than the national average. In 2004, the average remuneration in Shunde was RMB18,285, higher than the national average of RMB16,024. The private vehicle possession rate per 100 households was also the highest among all the county-level areas in China.⁵

We paid visits to Kelong Home Appliances Co., Ltd., Midea Group and Galanz Group in Shunde. The three enterprises entered the home appliance industry in the early 1980s. The leaders of the three enterprises confirmed the decisive role of the first introduction of the reform and opening in Guangdong, the establishment of special economic zones and a series of favorable tax and industrial policies that encouraged foreign trade in their entry into the home appliance industry. They underwent the rapid development in the 1980s and the IPO in the 1990s. After almost 30 years of growth, they become famous in China and even the world. Let's take Kelong Home Appliances Co., Ltd. headquartered in Shunde as an example. Its export rose continuously (see Figure 1). Shunde was awarded Top 100 Enterprises in the Global Emerging Markets by World Economic Forum in 1999 and Top 100 Listed Chinese Companies by *the Fortune* in 2001.

⁴ "Practice and Exploration of Guangdong's Reform and Opening" (syllabus of the report in the Philippines), Liang Lingguang, June 2002.

⁵ <http://www.shunde.gov.cn/> and "2005 China Statistic Almanac".

Figure 1: 1998—2005 Kelon Exports (unit: \$1,000)



Data source: Kelon Home Appliances Co., Ltd.

The three enterprises not only maintained rapid growth, but also made contributions to local economic development. Let's take Midea Group as an example. It has a total asset of RMB9 billion, employs over 30,000 workers and possesses five major production bases. Midea has paid over RMB3 billion of taxes and donated over RMB50 million to social benefit and education undertakings since 1990. Meanwhile, Midea has also made contributions to the development of supporting industries and employment. Now, Midea now has over 1,000 supporting enterprises, including nearly 300 in Shunde, almost 400 in Foshan and over 500 in Guangdong. The total output value of its supporting enterprises amounted to RMB7.8 billion, including approximately RMB4.5 billion in Guangdong. Its supporting enterprises employed over 120,000 workers and contributed tax revenue of over RMB500 million.⁶

In the interviews, we learned that the three enterprises adopted similar hiring and training mechanisms. The employees of the three enterprises came from the following three channels.

1. Experienced senior technicians are mostly laid-off workers from other companies. The corporate leaders pointed out that they knew technology and were responsible, but it was difficult for them to find jobs in the emerging industries after re-training due to their elder ages. At the same time, these workers had heavy family burdens. Their unemployment would lead to a huge

⁶ Data are derived from the interviews with Midea leaders.

impoverished population in cities and hindered the education of the next generation. In addition, since the state offered favorable tax policies to those enterprises absorbing laid-off workers, the three enterprises were generally willing to employ these workers as technical backbones and provided them with more training. A mold-tracking worker in Galanz from Jiangxi. He began his work with molding technology at the age of 17. He worked for less than RMB1,000/month before he came to Shunde. Later he was laid off and couldn't find a job. Since his wife didn't have a formal job and his son was still in high school, his unemployment threw the whole family into financial difficulty. Later, he learned that laid-off old technicians could find jobs in Shunde. So he came to the job market. His first job in Midea Group was mold tracking. His starting salary was RMB1,700/month, much higher than before. Since Midea provided technical training every week, he got used to his new job quickly and improved his techniques continuously. He later was appointed the head of the team and his salary was also promoted. Three months ago when he left Midea, his salary was RMB3,000. Now, he found a better job in Galanz and was paid RMB3,500/month. Moreover, he had company-paid medicare and serious disease insurance. After the employees' dorm was completed, he would be the first group of employees to move in. He said he had never imagined such benefits in Jiangxi. Moreover, the living costs in Shunde were not high and RMB500 would be enough for him every month. So he could remit some money back home every month and his son now had the opportunity to complete his high school study and go to college.

2. Junior technical workers were mostly migrant workers from rural areas and new graduates from technical schools. Before the income in rural areas was low, the young labors in rural areas migrated to the coastal areas where export production bases concentrate. Although equipped with fundamental specialized technology, new graduates from technical schools in the hinterland couldn't find appropriate jobs because the hinterland didn't have enough labor-intensive export processing factories. The three enterprises in Shunde grasped this opportunity to import new graduates from technical schools in the hinterland. These graduates and migrant workers from rural areas had to pass a three-month probation period with a salary of only RMB400/month. Old technicians taught them some basic techniques and provided regular technical and safety training. If they became formal employees after the probation period, their salaries would be doubled. They

earned a salary much higher than that in rural areas and the hinterland and enjoyed the safety and medical insurance as well as food subsidy provided by the company. A graduate of a technical school in Hubei in Kelon told us that she wished to be appointed team head in the workshop and earn RMB1,200/month. Also, she wanted some training in management and to be appointed the director of the workshop. She said that her two years in Kelon was very helpful to her. She learned technology and could remit money back home to support her younger sister.

3. When we had interviews with the employees of Kelon Group, a graduate from Hunan University gave us a deep impression. He was brought up in a poor village in Hunan. His parents were farmers and their life was difficult. They ran a small business later and their savings were exhausted after he finished college. He was employed by Kelon two years ago in the graduation job market. He was involved in the technical R&D of air-conditioners. He said that many old employees left due to personnel changes in Kelon and the company hired many new graduates from colleges and universities. New college graduates like him would receive a one-month training session after they arrived in Kelon and were assigned to different departments for a two-month probation period. After six months of probation on post, they would become formal employees. Now, he was the head of his department and began to give guidance to new employees and junior technicians. He was very proud of himself. His current salary was RMB2,000/month and could bring some money to his parents whenever he went back home. Thanks to his two years in Kelon, he believed that he could give his parents a happy life. Although his salary was not very high, he would work for another two years in Kelon and further promote his working capacity and technical level. Afterwards, he may go to Shenzhen or Yangtze River Delta for a better job.

In the investigation, we not only had interviews with the leaders and employees of the three enterprises, but also learned the operation and employment of neighboring tertiary industries. The workshops and dorms of the three enterprises were surrounded by all types of stores: small restaurants, small supermarkets, small teahouses, etc. Most of the owners of such stores came from the rural areas. They came to the coastal areas because the income in the rural areas was low. Most of those people didn't like repetitive technical work and long working hours. They preferred more freedom. Therefore, after working for a few years, they used their savings to open small

stores or restaurants near the factories where they used to work.

In summary, the export oriented home appliance producers in Shunde not only promoted national and regional economy and provided the government with a lot of tax revenue, but also directly and indirectly created jobs to those who couldn't find jobs and reduced the potentially impoverished population. More importantly, those enterprises provided their employees with technical and safety training as well as job opportunities. They thus made contributions to the accumulation of human resources.

2.3 Changzhou City in Yangtze River Delta and its home appliance enterprises

We also visit Donghua Group, a famous company in Changzhou City in Yantze River Delta. Donghua grew rapidly in the last five years. Its sales amount rose from RMB1 million in the late 1990s to RMB2 billion in 2006. The impetus to the growth included the competitiveness arising from innovation and the acquisition of a previously state-owned foreign trade company in the wave of the transfer of state-owned assets in 2000. The acquisition opened the export channels and was the starting point of Donghua's expansive terminal sales networks. The overseas sales of Donghua Group rose from less than RMB10,000 at the very beginning to over \$50 million in 2004. The average growth rate of export orders was over 200%. The number of employees rose from fewer than 100 at the very beginning to nearly 6,000 now and the benefits of employees have been improved continuously. We learned that over 60% of the employees came from rural areas of Gansu, Sichuan and Hunan.

Mr. Huo, Production Director of Donghua Group, said that the growth of Donghua was promoted by foreign trade orders. After the acquisition of the foreign trade company in the late 1990s, the company opened a production base in the development zone because of lots of orders. The company grew rapidly in size and imported lots of machines and equipment. The total number of workers also doubled. As the export orders stabilized, the temporary workers the company hired became formal workers after they became familiar with workshop technology. Mr. Huo emphasized that most of the workers in the factory were trained by the company itself, because

most workers were labors from rural areas who knew little about production and technology. After several training sessions, they became experience workers after six months. Afterwards, they may apply to become technicians. After further concentrated training, about one third of them could be promoted to technicians and enjoy higher salaries and better benefits.

As for the issues related to foreign trade policies, Mr. Xiang Tongbao, Chairman of the company, said that the prolonged state policy that encourages the export of the home appliance industry was one of the major reasons why the company grew rapidly. Before 2005, the export rebate rate was 17%, which greatly promoted the export of the whole home appliance industry including Donghua. The export of color TVs grew at an annual rate of 60% for a long time and the growth rate of the export of air-conditioners once reached 100%. The export even surpassed the sales in the domestic market. However, the state reduced the home appliance export rebate rate by four percentage points, which increased the costs of enterprises and affected the export. Since the prices of many orders were based on the original tax rates, enterprises had to renegotiate with importers and many orders were thus postponed or even cancelled. This had a negative effect on the export of enterprises.

Mr. Xiang also expressed his opinions on the new export rebate system. In the past, the central government and local governments take the rebate responsibility according to fixed percentages. But according to the new export rebate system, the central government and local governments shared the export rebate burdens according to their shares of value-added tax revenue. In the regions where export concentrated, the raw materials and interim products of export-oriented enterprises came from other regions in the country. Therefore, since value-added taxes were in production, purchase and export, this meant that the value-added taxes of exported goods were inconsistent with tax rebates. The governments of regions where raw materials and interim products were produced acquired the value-added tax revenue, while the governments of regions where exports took place had to shoulder the rebate responsibility. Therefore, the governments of regions where exports took place normally didn't encourage the growth of export-oriented enterprises. On the other hand, the export rebates were seriously retarded and enterprises thus faced much difficulty in working capital. He said that local commercial banks

might provide hedge funds after the completion of export to help enterprises with their working capital.

III. Summary

In the last 20 years, China's home appliance industry represented by the Yangtze River Delta and Pearl River Delta prospered under the auspices of the open trade policies of the state and played an important role in China's economic development. It not only promoted the export, development and technological advancement of the whole manufacturing industry and pushed forward the rapid development of the Chinese economy as whole, but also provided the material basis for the regional economic and social development. Moreover, since the production of home appliances was labor-intensive, the growth of China's home appliance industry created a large number of jobs for surplus labors in rural areas and less educated workers and laid-off workers and prevented the emergence of new impoverished population in cities. Besides, the training mechanisms also provided a sound platform for the further development of employees so that they could find better jobs in relevant fields. Therefore, the growth of export-oriented enterprises represented by home appliance enterprises played a positive role in promoting China's economic growth and reducing impoverished population.