The division of production and sale of enterprise, the symbiosis, and the industry becoming hollow
—model and analysis—

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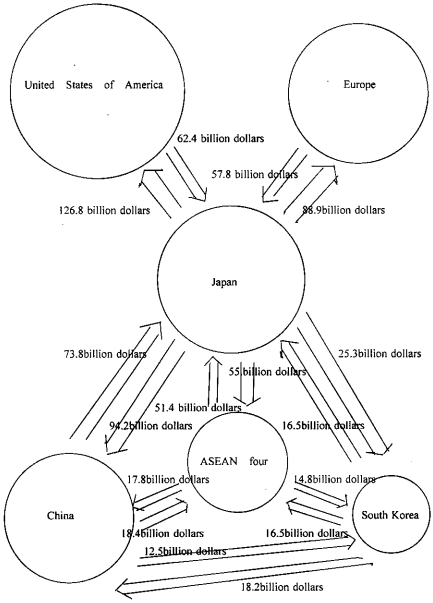
I Problem setting

Importance related to the economy of Asia are that toward Asia, especially the amount of a merchandise trade toward China increase in the high growth, in recent years when the amount of a merchandise trade of Japan toward America changes to the low growth, and that the structure Asian economy and banking problems extends even to the world economy and banking problems that involve not only an Asian region but also Europe and America.

Figure 1 Expansion of East Asia in the relation of trade



Origin : Making in 2004 of tradesstatistics (ministry of finance)

For instance, the amount of a merchandise trade toward America of Japan of fiscal year 2004 is 126.8 billion dollars by the amount of exports, and 62.4 billion dollars by the amount of the imports. Against, the amount of a merchandise trade toward Asian（China, NIES and ASEAN4）of Japan is 264.7 billion dollars by the amount of exports, and 195.9 billion dollars by the amount of the import, the amount of a merchandise trade toward Asian exceeds largely as for the amount of a merchandise trade toward America. Moreover, the amount of a direct investment toward Asian of Japan is 1083, 7 billion yen by 1989, until 1995-2003 in 5139, 8 billion yen. And the amount of a direct investment toward China is 58, 7 billion yen by 1989, until 1995-2003 in 842, 9 billion yen, the amount of a direct investment toward South Korea is 79, 9 billion yen by 1989, until 1995-2003 in 140 billion yen. Both show a rapid expansion. This suggests that the emphasis of the strategy of a Japanese enterprise shift to Asia.

The Asia shift of the emphasis of the strategy of a Japanese enterprise is greatly different in a fundamental point though it partially resembles the feeling of the United States and Europe of the threat in 1970-80's in an overseas strategy of a Japanese enterprise. It is not irrelevant to playing a leading role of a Japanese enterprise in development of Asia economic. In a word, the industry structure was very similar, because the model of economic development of nations of Asia was Japan. As a result, it tends for the competition between Japan, NIES, and ASEAN4 to intensify with economic development of NIES and ASEAN, to face a direct China investment for the survival.

The division of production and sale of enterprise, the symbiosis, and the industry becoming hollow makes phenomenaly with the harmonious integral there.

This research is in the analysis of the phenomenon of the division of production and sale of enterprise, the symbiosis, and the industry becoming hollow that appears to the industry or the corporate strategy. The following problem is set for that.

（1）It analyzse in compound eye on the macro analysis of industry and the micro

analysis of entrepreneurial strategy. The analysis of compound eye can illustrate coming into view of the one seen not in a peculiar research frame of the enterprise by introducing the macro analysis.

(2) A general competitive situation is assumed, and the model by whom the division of production and sale of enterprise, the symbiosis, and the industry becoming hollow that appears to the industry or the strategy of the enterprise are clarified, is constructed.

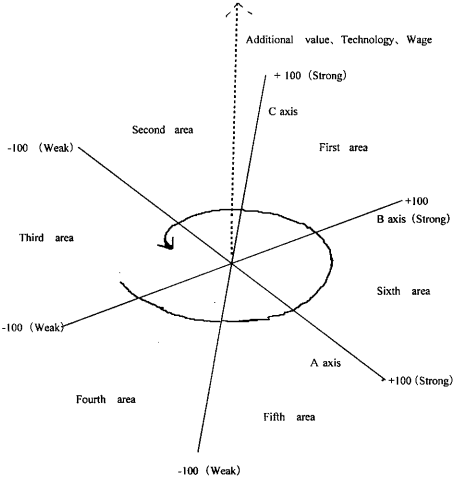
(3) The electromechanical industry, the fiber industry, and the car industry is analyzed in compound eye by using the clarification model on the division of production and sale of enterprise, the symbiosis, and the industry becoming hollow.

(4) The analysis of compound eye will teach an effective investment something of the entrepreneurial strategy.

Ⅱ Model on division of production and sale of enterprise, symbiosis, industry becoming hollow in Asia

The research is done based on the following model[1].

Figure 2 Model on division of production and sale, symbiosis, and industry becoming hollow



A axis present global competitive edge on the assembly production of the final product, B axis present global competitive edge in the standard part, and C axis present global competitive edge of the key part, in figure. The arrow indicates the direction of the development of the industry or the enterprise.

The third, fourth area:The industry or the enterprise is undeveloped, and the labor cost is cheap. But because technology is low, it gives priority to imports, and the industrial policy of making to domestic production (securing of employment and acquisition of the production technology) will be introduced before long as a national policy. In a word, the enterprise begins a joint form with the foreign enterprise, the assembly production of the final product is begun. As a result, the employment is secured, and the assembly production technology of the final product can be acquired. The single capital enterprise is not liked because the assembly production technology of the final product cannot be acquired though the job security is effective.

The fifth area: The enterprise inclines the effort to the accumulation of capital and technology. As a result, it first ties to a cheap labor cost with the acquisition of the assembly production technology of the final product, and comes to have global competitive edge in the assembly production of the final product. When global competitive edge attaches to the assembly production of the final product, it comes to be able to undertake the response to order (for instance, OEM production) from the foreign enterprise. However, this will depend on imports from a joint foreign capital enterprise because technology that produces the standard parts is still insufficient.

The sixth area: Global competitive edge of the assembly production of the final product strengthens furthermore because the effect of a cheap labor cost becomes visible in both sides of the assembly production of the final product and the production of the standard parts when the acquisition of the production technology in the standard part advances following the acquisition of the assembly production

technology of the final product. Moreover, a cheap labor cost will bring global competitive edge about the standard part. This becomes a case of life and death for the enterprise that produces the standard parts in the advanced country. This area uses imports from a joint foreign enterprise because it cannot acquire the production technology about the key parts yet. As a result, an assembly production of the final product from a cheap standard part by the labor cost and the import of key parts of a joint foreign enterprise are skillfully composed, and the product of the low price will be completed compared with an overseas product. The product of this low price has competitive edge in the domestic sale strategy.

The first area: The enterprise improves a technological level while continuing the assembly production of the final product, and will acquire the technology of independent production of the key parts. The labor cost is very cheap, when a transfer to the first area still compared with the advanced country though the industry and the enterprise develop considerably. As a result, it comes to have global strong competitive edge in the industry or the enterprise again by a cheap labor cost and the production technology acquired with the advanced country. This enterprise progresses the overseas sales of strategy with a strong, global competitive edge, expands. The overseas sales of strategy makes inroads into the market in the advanced country, improves the market-share. It will leave for a standpoint that is more advantageous than the enterprise in the advanced country on the price side by the market competition of the developing country at the same time. The advanced country introduces the national policy of the control of import and the local production and sales from a loose restriction to a strong restriction in this area for the protection of the industry and the securing of employment. The industry or the enterprise that defeats at a global competition though it is an aegis policy of this industry will cause the industry becoming hollow.

The second area: When the industry domestically enters the maturity period (time when the diffusion of the product to the consumer reaches almost 100%) and the

labor cost almost soars even to this level with the advanced country, the industry or the enterprise loses global competitive edge by the assembly production of the final product. Competitive edge of the production of the standard parts is continuously lost. It is global competitive edge of the production of the key parts into the final product that remains at the end. However, global competitive edge of this key part will be lost before long. As a result, the enterprise here would necessitates the selection whether moved the production base to the developing country that exists perhaps in either of the third, fourth area or the fifth area in the developmental stage of the industry (In this case, the industry becoming hollow is caused), or produce the product of the high performance and the high quality, make it to the brand internationally.

The third area (After one cycle):The industry or the enterprise doesn't have the road of the living at the stage where global competitive edge was lost by the assembly production of an final product, by the production of the standard part and the key parts, except that accumulated capital power and high technology are concentrated, a high performance and high-quality products are produced, and an international making to the brand is achieved. The success will be asked here.

I will continuously define a basic term.

global competitive edge:

$$\text{global competitive edge of industry} = \frac{\text{overseas shipment of industry} - \text{overseas receiving of industry}}{\text{sum of overseas shipment and overseas receiving of industry}} \times 100$$

$$\text{global competitive edge of enterprise} = \frac{\text{overseas shipment of enterprise} - \text{overseas receiving of enterprise}}{\text{sum of overseas shipment and overseas receiving of enterprise}} \times 100$$

The definition of the division of production and sale of enterprise: It is differentiation of productions and the sales structure adopted for the strategy of industry or

the strategy of enterprise by countries corresponding to the competitive edge of the industry or the enterprise.

The definition of symbiosis: It is dealings relation between the contribution (opportunity for employment, support of the technology and the management technique, and aid of the culture and the arts, etc.) that the investing firm can offer directly and the advantages (cost saving on the production element, opening of the market, and joint research developments, etc.) prepared directly for the investing firm.

The definition of the industry becoming hollow: When an individual enterprise in the industry transplants the sector of production, the product and parts are reimported from foreign countries (countries of transplants factory). At this time, the industry becoming hollow is the amount of the activity that reduces or discontinues a domestic production in the industry as for the production division.

The definition of the enterprise becoming hollow: When the enterprise transplants the sector of production in foreign countries, the product and parts are reimported in foreign countries (countries of transplants factory). At this time, the enterprise becoming hollow is the amount of the activity of the individual firm that reduces or discontinues a domestic production as for the production of division.

Ⅲ Case study with strategy of Japanese enterprise in Asia

A global strategy of a Japanese enterprise can be divided into the following three types[2].

1. Asia transplant (transplant factory) type

The strategy of the Asia transplant type is a case to restructure the cost competitive edge of the place in the most in the world through the Asia division of production and sale as for survive of the strong point of the thing-making in Japan, and to develop growth globally. A lot of companies that adopt this strategy type are Mabti, Aiwa, the Punch Industry, and Alpine, etc. and are seen also by small and

medium-scale firm.

Let's take up the case with Mabti. In Mabti, it leaves the motor for the toy, grows up as a micro motor principal occupation enterprise in the flow of making to micro about home appliance and an electronic equipment, etc. And this leading company that transplants the strong point of the thing-making to Asia, constructs the cost competitive edge of the place in the most in the world facing a global cost competition age, grasps about the half of the world share now.

Mabti has considerably advanced the Asia division of production and sale in a Japanese enterprise at early time, as the micro motor has the feature as the export industry that it is the intensive labor and high the specific gravity of the labor cost. This was a transplant to the developing country from the second area to the third, fourth area, if it sees from the division of production and sale, the symbiosis, and the industry becoming hollow of model. The first region of the Asia division of production and sale continued with Hong Kong Mabti of1964 (100% investment), Taiwanese Mabti of 1965 (joint company) and Takao Mabti of 1979 (100% investment). The labor shortage was caused by a economic of development of Hong Kong and Taiwan, moreover, the rise of the labor cost was remarkable. Therefore, the second region of the Asia division of production and sale became the Kanton ministry Togan city that was transplanted the production base for1986, and took the situation of 10,000 employees (not the direct capital investment but contract company) by five factories in around1990, and measured the reduction of the factory in Hong Kong and Taiwan.

The third region of the Asia division of production and sale became a development of the production base (100% investment) in the Dairen economic, technological development district of1989 (the first large-scale matter of 30 million dollars or more). As a result, the main force in the production base was two places of Togan and Dairen, Hong Kong had changed the character into the distribution base. Because the factory in Dairen was not able to expect the processing section of local,

it became the integrated system of production from raw material to finished products such as the metallic part press, the plastics molding, and the grinding of the motor axis and the assembly. In addition, it was 7700 employee scale. However, the wage level rose remarkably in economic development that was rapid in Dairen, then has became to construct amount of factory in economic development small district in Gabouten.

The fourth region of the Asia division of production and sale became in Sosyuu City, Shanghai (Gokou) that constructed a new factory in latter half of 1990, this was the one having aimed at the acquisition of a Chinese market. The transplant to Hong Kong, Taiwan, and Takao of Mabti stayed from the assembly production of the micro motor until the standard part for local procurement1. And the production of the standard part and the key parts used a things that had been produced with the production plant in Japan. Therefore, it was not complete production discontinuance even though a domestic production plant was reduced at this stage. However, the transplant to the Kanton ministry Togan city and the Dairen economic, technological development district procured the majority of the standard part in the locally, switched to production in local factories of the key parts. For instance, the silicon steel board of the central core of iron material in the main material of the motor procured from the Japanese coil center (joint company of Marubeni, Itohtyu, and the Orient Core of Iron) in Dairen, the foam material related to wrapping from Chinese enterprise, the cardboard from Morishigyou and Rengo of the Japanese. As a result, Mabti discontinued all the home production of the micro motor.

Moreover, the sales is about 38% in Japan, about 15% in north America, 20% in Europe, 20% in ASEAN, 10% in China. It was limited to the domestic sale 10% by the domestic industry protection method in this times China (domestic sale freedom after 1997)[3]. The globalization of the sales market demonstrates the strong point for a local economic depression.

Generally, the industry becoming hollow has been brought if it sees from an

electromechanical industry, though the strategy of Mabti was a big success at a corporate level. It is similar to Aiwa of the CD radio-cassette stereo, Alps Electric of the MS・VTR・AV tuner, Inan Electric of the Hired Harness, etc, seen by Star Micronics of metallic parts, Maruyuugoukinn of cast and Somemiya of the precision machine etc, in another industry.

Figure 3　Competitive edge between Japan, South Korea, and China in the industry of electromechanic

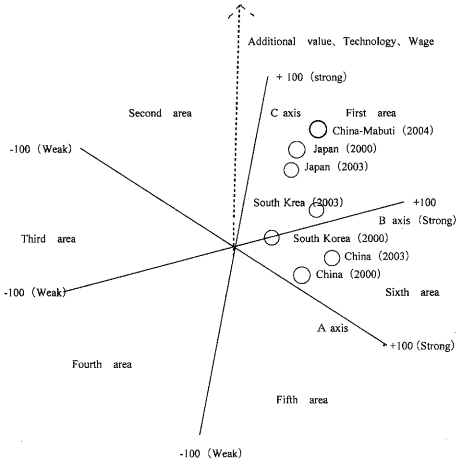


Figure 3 shows the global competitive edge chart of Japan, South Korea, and China of an electromechanical industry. It is becoming weak every year afterwards though both production of the key parts, the assembly production of the final product, and the production in the standard part rise from 1980 to 1990 in the competitive edge of Japan about an electromechanical industry.

It strengthens about the assembly production of the final product after 2000 though the competitive edge of South Korea is located in the level about the production of the key parts for2000, 1990, 2003. The assembly production of the final product is surpassing little to Japan, equal to South Korea though the competitive edge of China is at a position that is lower than South Korea about the

production of the key parts for1990, 2000, 2003. Moreover, figure is showing as for the competitive edge of China-Mabuti.

A digital home electricity of Japan in this accounts for 50-60% of the global market, and is thought to be the only method of solving the industry becoming hollow to which only the strategy of making to the international brand of this field is partially progressing within the country.

2. Division type of production and sale in Asian region

The growth strategy of the division type of production and sale in an Asian region is the strategy that in standard thing-making transplants an Asian regionas for the production base, the thing-making of the high performance and the high quality tries to maintain global competitive edge by producing domestically, when the industry reaches domestically at maturity, and exists in an Asian region at the term of growth.The enterprise that adopts this strategy type of growth includes Toray, Teijin, and Suntory, etc.

Let's take up the case with Toray. The feature of the growth strategy of Toray was to give priority to the fiber section of the profession. The strategic deploy to an Asian region started from export to China and the circumference country. After it had divided from the rayon fiber into the nylon fiber, it came to sell foreign countries for oneself though it sold at first through Mitsuibutsusan. The strategy turned about an Asian transplant strategy by the national policy (It is said the industrialization policy of import substitution) in each country of an Asian region, when entered 1960-70's. Toray was established for the joint enterprise that does the spinning of mixed textile goods of the polyester rayon, the woven cloth, and the dye processing to Thailand in 1963 (TNT Company that produces nylon), a company in South Korea (investment of capital in the company abroad that produced polyester), a company in Taiwan (joint company that produced polyester) and a company in Indonesia (establishment of three companies to the production and higher-order processing of an original string and the cotton wool of synthetic fiber) one after

another, when the patent of the nylon synthetic fiber expired in 1960's. As a result, the integrated system of production from the production of an original string and the cotton wool of synthetic fiber to a higher-order processing was established to an Asian region except domestic. Overseas sales for Japan are not done by the principle until this time, to the local production and third country foreign countries sales.

When it enters 1970's, the local enterprise had global competitive edge in the production of final products because a dominant low cost of the labor. As a local government was adopted strongly the export promotion measures for the foreign capital acquisition, in response to this Toray had invested in Hong Kong fiber synthesis converter TAL company in 1971, and administer integrativly the Toray controlled firm in an Asian region aiming at overseas sales to the United States and Europe. A large-scale production subsidiary company (Penfibar Company) that made overseas sales outside an Asian region a specialty was constructed in Malaysia in1973. This company had the production capacity of the polyester of 70 tons in the daily output at that time in the maximum scale.

As for Toray, because the labor cost soared domestically in the latter half of 1980's and the cost competition by the fiber overproduction intensified, it came to do the transfer of the production activity to an Asian region on a large scale. This transfer has developed from the clothes of the intensive labor and the processing process of the textiles into the production of the artificial fibers of high performance through cotton textiles. As a result, this company inclined toward to the strategy that specializes only in parts and final products of high performance and the high quality with the comparative advantage about the home production and sales. For instance, advanced materials and carbon fiber are them, and world number one in the field of carbon fiber. The 60 percent of sales is due to home production though sales in fiscal year 2005 are 1.2 brillion yen or more, can be paid attention of the domestic production scale to maintenance and to try the expansion[4)].

Figure 4 Competitive edge between Japan, South Korea, and China in the industry of fiber

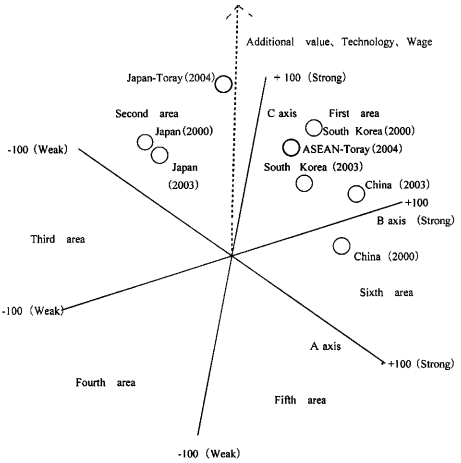


Figure 4 shows the global competitive edge chart of Japan, South Korea, and China of the fiber industry. After2000, the competitive edge of Japan shows the tendency to decrease though is at the position at an middle level for1990 about the key parts. Competitive edge is almost lost about the production of final products and the production of the standard parts. A rapid decrease is seen about the production of final products and the standard part for 1990, 2000, 2003 though the competitive edge of South Korea is at a position that is stronger than Japan about the production of the key parts through 1990, 2000, 2003.

The competitive edge of China outstripped Japan of the production of the key parts for2000 and 2003, greatly pulls apart Japan about the production of final products and the standard part for 1990, 2000, 2003, is overwhelming South Korea.

As a result, the fiber industry in Japan should produce the products of the new high performance and the high quality, make it to the brand globally (The industry becoming hollow has already been caused). As an archetypal example, figure shows the competitive edge of Toray.

3. Global development type

The growth strategy of a global development type is a strategy that aims at the local production and the local sales corresponding to the policy of domestic production of the each country government to develop the strong point of the thing-making of Japan globally. The company that adopts this growth strategy type includes Toyota, HONDA, Nissan, Sony, NEC, Canon, and DENSO, etc.

Let's take up the case with Toyota. The growth of Toyota is divided into the three patterns and the three age. In a word, it was the home production and sale of 1950-60's, globaly the overseas sales of 1970's, and a global local production and sales of 1980's. Toyota progressed the expansion strategy of the production scale, the relative reinforcement of the affiliated subcontract company, and the construction strategy of nationwide sales networks under the favor of the industrial policy in the country and the control of import of a foreign car in 1950-60's while domestic car demand increased rapidly. In the car production that consisted of parts in 20,000 points or more, the expansion of the production scale and strengthening the relation with the subcontract company was brought a big reduction in costs, and was brought forward the improvement of productivity. Moreover, the construction of the sales network led to a great sales expansion. As a result, the number of Toyota of the car production was reached almost 700,000, and grew up to the top maker in country in 1968.

The car demand of the good fuel cost equipped with a small engine expanded globally by the sudden rise of the oil price with the oil crisis of two degrees when entered 1970's, and the control of the car emission came to be enforced additionally. The change in these car environments worked dominant in a Japanese maker that had gone forward on the accumulation of the technology that improved the fuel cost efficiency for many years with the small engine. As a result, the carmaker in Japan marvelously has extended the number of overseas sales from 1.09 million export numbers of 1970 to 5.97 million of 1980（When the number of the domestic sale is

added, 11 million). Toyota sent American market the Corolla, the Celica, and Hairaccs for leisure as an emphasis strategy car, and was recording about 700,000 overseas sales in 1977. Moreover, careful Toyota toward a market of Europe (Great Britain, France, and Germany, etc.) became positive in European market from this (Thailand is important in Asia). Additionally, the Toyota Production System called a worldwide production revolution will be completed at this time.

When it entered 1980's, the number of sales of an car company of big three in United States was decreased sharply to took the delay in the correspondence to the chang of the car environment (the market-share of a Japanese car was increased 21.2% rapidly), the operative was dismissed at the factory in various places, aggravated the problem of employment. All the United States labor union of the car requests for the control of import of a Japanese car and it has developed into the situation that the Ford Company brings a case to the United States International Trade Commission, joining in this. Consequentially, popularity to American's Japanese car not only was declined but also it just rose because of the Japanese carmaker's self-imposed control, and many of provincial governments came to demand the local production and the local selling from a Japanese carmaker for economic activation. The United States advancement of Toyota was later than HONDA and Nissan. Moreover, it was careful. Toyota agreed from HONDA after a delay of three years to joint production and sales (200,000 in the annual output) of a small passenger car in 1983 with GM. Joint company NUMMI of Toyota and GM (New United Motor Manufacturinng Inc.) was established in Carifolnia. It was introduced the Toyota Production System at this time, the person related to GM was surprised, when showed in the goodness of the production efficiency, and a visit of the person's related to United States car is said to be long continued. Toyota continuously established single production plant TMMU (Toyota Motor Manufacturinng U.S.A.) in Kentucky in 1988, and the system of the local production and the local sales was established.

However, attached parts take the policy of local procurement though key parts are the thing produced at the factory in Japan.

As for the Japanese carmaker's advancement to Europe, it concentrates on Great Britain, and the production are by the local production of Great Britain, the sales are turned to the local sales and Europe sales in the strategy. The reason that concentrated on Great Britain is a revival of large-scale manufacturing in Great Britain, and that the attracting of a Japanese enterprise doesn't exercise M&A as a rule for the best, and a Japanese producer exists a big market in the entire Europe. Toyota delayed starting compared with HONDA and Nissan in the Great Britain advancement. This time ahead, though HONDA is arriving at the locale as a soldier, boarding from leveling the ground, so it is saying that Toyota is plunder the percentage of the profit, a not welcoming metaphor onToyota came to flit. Toyota established TMUK Company (Toyota Manufacturinng U.K) aiming at the local selling and Europe sales by the local production in 1989. The production scale was the annual outputs of 100,000 and Carina E based on the Corona is made a strategy car (Establish it in the Derbyshire in the center part Midland provinces the factory). Attached parts are bought from not only local procurement but also European Japanese Company, a German enterprise, an Italian enterprise, and a French enterprise here though key part was the one produced in Japan.

As for the car sector, the employment absorption of power is strong, and the effect of the economical spread is large for Asia and China, because a lot of related industries are needed. Therefore, each country is doing a prohibition of the imported car in principle and a high setting of the local procurement ratio of parts, to place the car sector in the key industry, and to protect a domestic enterprise even though is undeveloped. As for the walking, when do gradual the speed of the Japanese carmaker's China advancement than the carmaker in the United States and Europe, the voice to have misgivings about the future is not little. A Chinese governmen is, for instance, done the consolidating policy of the passenger car production,and has

already been deciding as a three major makers by the First Train and the VW of group, the East Wind Train and the Citroen of group, the Shanghai Train, VW, and GM of group, and is shape that a Japanese producer aims at the seat of the group following this.

Toyota's relation with Tenshin in China is historically strong. Assembly and the body factory in the commercial vehicle track was established in Tenshin in1938 and Hokusi carworker industry Ltd. was established in 1940. Afterwards, the passenger car Crown was exported to China in 1964, it was established the Driving License Training Center of Capital Train Toyota Motor in Peking City in 1980, and the Skill Worker Training Center in the Gold Cup Train, and the Tenshin Domestic Making Technical Assistance Center in Tenshin Train one after another. However, the China advancement of Toyota is winding. Nevertheless, there was no Toyota according to the cooperation request of a Chinese government. Recently, it was acquired the authorization of a Chinese government in 1996, and was the establishment of Tenshin Toyota Train Engine limited company that began operating in 1998 when Toyota advanced China. The number of 150,000 Coronas are scheduled to be produced at this factory in the future (150,000 Crowns are announced in 2005 the production schedule). Also here, attached parts are in the transplant of the Toyota group or by local procurement again as well as the case of Europe though key part was the one produced in Japan[5].

Figure 5　Competitive edge between Japan, South Korea, and China in the industry of car

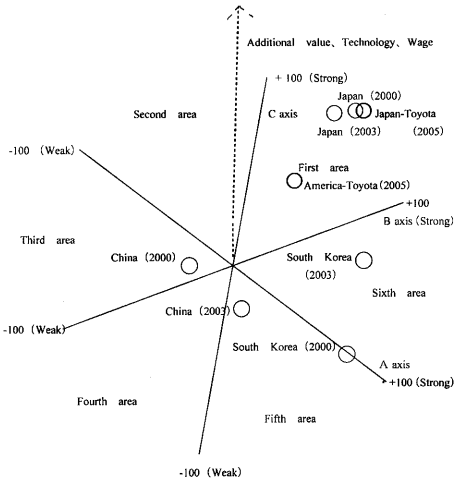


Figure 5 shows the competitive edge chart of Japan, South Korea, and China of the car industry. The competitive edge of Japan occupies a strong position about the production of the key parts and the assembling production of the final product.In a word, it is in a strong standpoint in global competitive edge. Therefore, this industry doesn't seem to bring Japan the industry becoming hollow. Moreover,figure shows the competitive edge of Toyota.

The competitive edge of South Korea strengthens from 1990 to 2000 about the assembling production of the final product, and attaches, and is acquiring power about the production of the standard part or the production of the key parts recently in 2003.

The competitive edge of China has not had global competitive edge about the assembling production of the final product and the production of the key parts yet. It is at the stage of technological acquisition of foreign enterprise, from beginning to end of the home production and the domestic sale to fill domestic demand, and it doesn't exist at the stage where global competitive edge is asked.

Ⅳ The policy of industry level and the Strategy of enterprise by which industry becoming hollow is evaded

The escape industrialization policy was carried out resolutely as a policy at the industry level in the United States, for example deregulation. As a result, a new businesses on the information of service, the medical treatment of health service, and the biotechnology of industry, etc. were created one after another.

This evaded the industry becoming hollow. Industrial Structure Council in Japan also is indicating the following five directions as an industry structure conversion.

(1) It is to establish the knowledge base, and develop the service section in the 21 st century.

(2) The additional value must be large of a soft section, the contents production, and the leisure fashion relation that puts the base on creativity in the sensibility type field.

(3) The development of peripherals of the airlines, the ship, and the space section etc.should be able to be expected by combining the electronics technologies with the IT technology in the Frontier field.

(4) The nursing field is a product development for the senior citizen, and the market that will expand most in the future.

(5) It should be able to be expected that the market scale expands worldwide to the environmental creation and the environmental preservation field where the electronics echnologies were united with the machine industry[6].

Becoming hollow of the enterprise is not easy to happen, when is internationally in the comparative advantage in production and sales, and whether be able to be maintained or to be strengthened internationally the comparative advantage become turning points in manufacturing in Japan. Concretely, the products of the high quality and the high performance are produced, and it exists whether it is possible to make it to the brand. This is almost corresponding to "Principle of No. one or No.

two" of J・Welch (Jack, Welch) of GE[7]. Strengthening on both sides of the research and development investment and the talent development investment is indispensable to produce products of the high quality and the high performance in this, to make it to the brand as the core measures. The research and development investment of Japan in fiscal year 2005 is only 3% of GDP. It is too fewer than the United States. Moreover, if the talent development investment is compared with the United States and Europe, it tends to decrease by half in the Japan since 1990. Moreover, it is to create in high-value-added in the service industry of the upstream and the downstream process related to this, while strengthening the comparative advantage of the thing-making of a Japanese enterprise. For instance, it is the taking new fuel development, the replenishment service of parts, and the peripherals, the repair services, the leases, the used sales service, and the rationalization of distribution and a plan and design service of the plants etc.

1) To endure the analysis of the phenomenon of the division of production and sale, symbiosis, and the Industry becoming hallow about the industry and about the entrepreneurial strategy, this model added the retouch and the correction from my article. Hasegawa, M. "Growth strategy of Japanese enterprise — division of prduction and sale and symbiosis —", *The East Asian Economic Research Magazine*, 64. volume2, pp 23～31.

2) The method of classifying a global, competing strategy of a Japanese enterprise is detailed to the following book. Tsutomu Tsuchiya,the Mitsubishi Research Institute of Asian Market Research Part, *A Japanese Enterprise Can Succeed In Asia*, Toyo Keizai Shinposha, 2002, pp.130～139.

3) The sales, the current profit, and the overseas production base of Mabti in fiscal year 2004 are in following.

62.8 billion yen (single), 99.4 billion yen s (combi) of sales. 18.6 billion yen (single), 19.8 billion yen (combi) of current profit. concentration of overseas production base Asia (especially, China), (Eol DB Tower Service "Corporate detailed information: Mabti)

4) The sales, the current profit, and the overseas production base of Toray in fiscal year 2004 are in following.

476 billion yen (single), 1,298,6billion yen (combi) of sales. 43 billion yen (single), 76.8 billion yen (combi) of current profit. Asian regional whole area and Europe of the overseas production base, (Eol DB Tower Service "Corporate detailed information: Toray)

5) The sales, the current profit, and the overseas production base of Toyota in fiscal year 2005 are in following.

9,218,3billion yen (single), 18,551,5billion yen (combi) of sales. 856.2 billion yen (single), 1,754,6billion yen (combi) of current profit. United States, Europe, and Asia of overseas production base, (Eol DB Tower Service "Corporate detailed information: Toyota)

6) Origin : Report of Industrial Structure Council in Japan

7) General Electric: *Jack Welch's Second Wave (A)*, Harvard Business School 1991. Anonymous. "Key to success : People, people, people". *Fortune*, October 27.1997. p.232.