

The SMEs of Ota City, Tokyo – The Secret Strength of Japan’s Manufacturing Industry

By *Yamada Nobuaki*

The Source of Japan’s Global Competitiveness

The manufacturing process of Japanese factories is quite unique in comparison to other countries. Large corporations assemble products except for some special parts and most components are procured from subcontractors. Japan’s leading manufacturers, such as Toyota, have a massive number of affiliated companies under them, and they apply a just-in-time supplying process to carry out efficient production.

This system consists of an impressive pyramid of subcontractors starting from the primary subcontracted factories to the secondary, tertiary, quaternary and beyond. Small-sized factories which employ less than 10 people prop up the bottom end of the subcontracting pyramid. The greatest advantage that Japanese manufacturing industry has in terms of global competitiveness is the existence of a system in which suppliers with the highest level of technology deliver parts at the lowest possible cost.

The reason why Japan’s balance of trade figures have been in surplus since 1981 is that the manufacture of machines – which

account for 80% of exports – is carried out according to this supplying system of parts by small and medium-sized enterprises (SMEs). Japan beats the global competition by producing technologically superior and low-priced products, and the trade balance stays in Japan’s favor. However, a trade surplus leads to yen appreciation. Normally, this brings about a decrease in exports and an increase in imports, reducing the surplus or even creating a deficit, but Japanese industry reacts by trying to reduce the procurement cost from the subcontractors in order to reduce production costs and overcome the strong yen aiming for economic growth through exports. This means that the subcontractors are required to make further technological improvements and shorten lead times with even greater precision. As this cycle repeats itself, trade remains in surplus every year despite the ongoing strength of the yen.

Features of the Machine Industry in Ota City

The industry of Ota City, Tokyo, represents a microcosm of Japan’s SMEs. The number of factories peaked

in 1983, and there were 5,040 factories as of 2003. Most of them are extremely small, with as many as 80% (4,112 factories) having less than 10 employees and about 50% (2,525 factories) having only a few employees. Approximately 75% of them fall into the categories of metal products, general machinery and implements, electrical and communication equipment, electrical parts and devices, transport equipment and precision instruments, and are particularly specialized in the engineering and metalworking industry. The vast majority of these produce parts or provide processing technology for specific orders; they may not work as subcontractors for a specific large corporation, but they have corporate clients in many different areas.

A diverse range of processes is necessary for the production of machine parts, and because the factories in Ota City are very small, they are obliged to focus on specialized technology, and may not produce a completed component by themselves. Therefore, these companies build up strong ties and networks with each other in order to supply each other with the necessary technologies; in other words, production takes place via a system of mutual interdependence. This enables companies to survive by focusing on their own specialized technology. This is possible since the industrial concentrations in the area cover a diverse range of machine-processing technology. This kind of subsistence format is referred to as integrated dependent-type corporations.

The reason why the machine industry in Ota City has become famous throughout Japan is because it has created an “Ota brand” by being able to respond swiftly to clients’ strict demands and at the same time to provide a high level of precision. Companies that never turn down orders even for single part production and work proactively to meet clients’ needs are attractive even



SMEs in Ota City supply technologies to each other in horizontal networking

Photos: Yamada Nobuaki



Ota City's SMEs participate in overseas exhibitions



Ota Techno Park in Thailand

during an economic recession. Although set-makers shifted their assembly plants overseas during the 1980s, companies that cater for special orders showed no signs of decreasing.

However, even Ota City companies operating at this high level saw their sales turnover decrease dramatically when the 21st century began, as can be seen by the fact that the number of factories in Ota City decreased by 1,000 in 2000-2003, resulting in an unprecedented crisis in the region's industry. The main reason was that the advanced technology for producing industrial parts by Japanese SMEs was being rapidly transferred to Asian countries. Even though Ota City industry was advanced in specialized technology, it could not help being affected by the entire Japanese manufacturing industry relocating overseas.

Industrial Compartmentalization in Asia

In the early 1990s, there was a long-term structural recession in Japan due to the collapse of the bubble economy. In the late 1990s, with the technological improvement of Asian countries including China, production was accelerated and industry was deeply hollowed out.

Japanese domestic industry is at a disadvantage in term of price competitiveness and labor costs. However, when

the technological level is still low, cheaper labor costs are an insufficient reason to attract production overseas. Rapid advances in technological level have been assisted by the development of information processing such as CAD and CAM in manufacturing, and the introduction of sophisticated machine tools has made it possible to produce parts of superior quality. As technological capabilities have developed, clients have expanded their production bases in Asia and have created an increased need for local procurement. In response to this, Japanese SMEs have also come under pressure to relocate their operations overseas. The changes in the industrial foundation that have come about through globalization are at the root of the stagnation of Japan's economy at the beginning of the 21st century.

Japan's manufacturing industry now needs to establish an international division of labor to divide what will be developed and continued in Japan and what will be carried out in other parts of Asia. Large corporations have already implemented this, but it has now become an unavoidable issue for Japan's SMEs.

For the last 12 years, Ota City has focused on enabling its SMEs to jointly participate in overseas exhibitions. Some of these companies have expanded their operations by setting up overseas subsidiaries and building factories.

Opening of the Ota Techno Park

The construction of the Ota Techno Park, a concentration of factories for Ota City's SMEs, is currently in progress in the suburbs of Bangkok, Thailand. This project has been designed by the Amata Corp. PCL to provide rental factory facilities, offering the adequate space for the needs of SMEs. Amata highly evaluates the technological capabilities of Ota City's SMEs that Thailand needs, and seeks to strengthen the country's industrial infrastructure through technological transfer, hoping that this in turn, will attract even more companies. Moreover, for Ota City's SMEs, establishing subsidiary factories in Thailand, whose economic growth has been steady, allows them not only to meet the needs of the clients expanding their local operations but also creates opportunities to secure new ones. This cluster of factories is planned to open in June 2006, with several powerful Ota SMEs with superior technologies already preparing to locate there. It would be ideal if this win-win relationship will be a step forward in the grassroots exchange that will lead to further industrial cooperation between Japan and Thailand. **JS**

Yamada Nobuaki is the Executive Director and Secretary General of the Ota City Industrial Promotion Organization.