Interview with Takanobu Nakajima, Professor, Faculty of Business and Commerce at Kejo University

# hat Is the Service Sector & How Can We Strengthen It?

By Japan SPOTLIGHT

We need to clarify what are the fundamental distinctions of the service sector and what can be done to promote it before getting into analysis of the possible role of the sector in Asia, our highlighted subject in this issue. We were lucky to have an expert on these basic questions, Prof. Takanobu Nakajima of the Faculty of Business and Commerce at Keio University, working just 20 minutes by subway from our office in Ginza, in the center of Tokyo. He has devoted many years of academic research to the study of the service sector since his young days at the Keio Economic Observatory, and is now one of the most distinguished experts on this issue in Japan. Our interview with him covered not only general issues on the service sector overall but also specific issues in the service sector in Japan.

(Interviewed on March 27, 2017)

### Prof. Nakajima's History of Research

## JS: Could you please briefly introduce your research on the service economy?

Nakajima: When I was a graduate student at Keio University, I was involved in research on productivity measurement at the Keio Economic Observatory organized by Prof. Kanji Yoshioka. I was helping him as a research assistant and at the same time learning about measurement methods of productivity, and I started applying them to a variety of sectors including services. This was my starting point for research on the service sector. I then published a book titled "Econometric Analysis of the Productivity of the Japanese Economy" (Nikkei, 2001) based upon my research. I covered mostly service industries in this book. The manufacturing industry, as you know, has a tangible output and thus its

productivity can be measured rather easily, such as in the form of unit output per input. However, the service sector's output is intangible and its productivity is hard to define. I was interested in this puzzling nature of the service sector and worked hard to discover a method to quantify its output.



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### **Service Sector Contribution** to Growth Potential

JS: We will apparently need to enhance Japan's economic growth potential to increase national welfare. How do you think the service sector can contribute to a rise in growth potential?

Nakajima: In Japan, unlike other capitalist countries, it is not very acceptable that a service can be sold at a market price in accordance with the market's evaluation of its quality. I think this is a fundamental reason why Japanese service sector growth potential would not be reflected in the whole economy's growth potential. The Japanese underestimate their service sector's market values.

JS: The Japanese service sector's productivity level is said

to remain low, compared with those of other countries. In spite of the problem of measuring its level, do you think this is still true?

Nakajima: International comparisons of service sector productivity are very difficult to do objectively, since we do not have any benchmark index among the service sectors of all nations. We can do international comparisons of productivity levels very easily in the case

of manufacturing sectors, since output could be the same regardless of production sites and we can easily calculate how much output would be produced by the resources required in common production processes all over the world for each item of manufactured goods.

However, in the case of services, depending upon the country producing and consuming them, their market values differ, reflecting a country's culture. This makes it difficult to have international comparisons.

In Japan, we do not have a custom of valuing services, which is not the case in the United States, for example, where people will give a tip for good service. This culture of Japan would make it difficult to enhance the quality of services and raise their productivity in accordance with their market values. So I believe we cannot objectively compare the productivity levels of services among nations.

Of course, depending upon the kind of service, there are some that work by global standards such as hotels or English software, in which we can compare productivity internationally. With those services, just like manufacturing sectors, high productivity companies survive and low productivity ones cannot help but imitate the business practices of the high productivity ones.

# JS: To correctly measure the productivity of services, will it be necessary in Japan to gather more statistics on services?

**Nakajima:** It is not true that Japan is a nation suffering from a lack of such statistics in particular. Other nations as well will need to gather such statistics. There are, I suppose, two issues related to service statistics in Japan.

One issue is that there is a wide range of services covered by many ministries in the government, so there is no integrated database on statistics of services. Now the Ministry of Internal Affairs and Communications has decided to implement a new census on the service economy, and create data sources for all the service sectors' added value, which is a common statistic of output among all the services.

The other is that even with such newly created data sources, some distinctive aspects of the quality of Japanese services such as hospitality or politeness cannot be well quantified and it would be worth producing another kind of statistic to measure such quality.

# **Two Categories of Service**

JS: We could categorize services into two groups such as "infrastructure" and "contents". Would this categorization be useful in clarifying what services would be relevant in talking about possible enhancement of productivity and what services would not be?

Nakajima: Yes, it would. However, I have a fundamental question about the productivity of services. It is often said that the low productivity of the Japanese service sector is the reason why Japanese economic growth has been so low. But thinking about the

administration sections in a manufacturing company, raising productivity in those sections would not lead to an increase in the total profits of the company. It would be necessary to raise productivity in the sales sections or product development sections, as well as factories, in order to gain more profits as a whole company. With a rise in productivity in those sections, the administration sections' productivity could follow it, but not conversely. I guess "infrastructure" services can be considered as similar to those administration sections in a manufacturing company. I believe that it is not those services which would encourage Japanese GDP growth, but that GDP growth itself would enable those services to grow after it

JS: We now have the concept of "connected industries", with software services being a typical example. Today a key component of competitiveness in many manufacturing industries comes from the software services embedded in them and connecting business to business or industry to industry. So now we have software services increasing in parallel to expanding manufacturing sectors.

Nakajima: Yes, that is true. Meanwhile, agriculture and fishing products could sell well by better processing and sales promotion. Those products could not have high added value without added value by the secondary as well as tertiary industry. The part of the added value produced by the tertiary industry such as distribution or sales promotion services could be defined as the output of services in the second category, namely "contents".

In this category of services, it would be relevant to say that enhancing productivity would lead to an increase in the total production of agriculture and fishing, primary industries. We should not mix this up with the argument on "infrastructure" services. No matter how much the government may try to raise the productivity of "infrastructure" services, it will not result in any rise in productivity overall in the Japanese economy, but instead a rise in productivity without growth, in other words, a decline in the quality of services by cost reduction, such as reduction of employees. If this is expanded to "contents" services, it would be a tragedy, as quality is vital to those services.

For example, in the bus transportation service, if they try to enhance their productivity to survive competition by employing aged drivers at lower wages and ready to work longer hours, there would be more tragic traffic accidents. This clearly means a decline in the quality of service. Though it appears to be a rise in productivity, since the bus will carry more passengers and with a cheaper workforce, as a matter of fact it would be a fall in productivity.

JS: There may be some services where a rise in productivity can be measured easily by qualitative improvement and not cost reductions, and some services where it cannot.

Nakajima: In the case of "contents" services, if they can get

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customers who would be ready to pay them for improved quality of services, they could earn more profits and in the end contribute to the whole economy's growth. But if they cannot increase output through any increase in input for quality improvement, they cannot win any increase in returns for the sector, and that would lead to a decline in the quality of services. For example, in the tourism sector in Japan they could raise the tariff rate for services, including hospitality, for which overseas customers would be ready to pay, though domestic customers would not, and try to attract more overseas customers.

In the case of transportation services, a typical "infrastructure" service, they would need to clarify what they intend to do to improve the quality of services. For example, they could turn a mundane train journey into a luxury trip during which wealthy people could enjoy lunch or dinner and other entertainments. This could be considered transformation of "infrastructure" services into "contents" services.

# High-Quality Management in the Service Sector

JS: In order to enhance the quality of services or make them more marketable we would need to get more human resources with management expertise into a service sector like tourism in regional areas in Japan which suffer from the lack of such resources. How would it be possible to achieve this?

Nakajima: There are two ways to achieve modernization of management: one is to increase the added value of output, and the other to save input, and both can be done by IT. The first is to create new high-quality services by using customers' data through Al and IT to discover the real preferences of consumers. The latter is to replace a high-wage workforce with Al and IT as economic growth progresses. However, saving personnel costs could lead to a decline in the quality of services. This must be avoided, though in Japan now this does seem to be exactly what is going on.

I believe the first way is preferable and given the labor shortage we are now facing in Japan, there should be greater efforts by companies to hire competent human resources by raising wages. In this process, they would have more incentive to use IT or AI, and I hope this would lead to achieving management modernization.

I certainly believe that we will need more high-quality management experts in our local service industries in pursuing such modernization by AI or IT. This would lead to a revitalization of local Japanese economies.

JS: Smooth entries and exits would be crucial in raising the efficiency of the whole service sector. With the adoption of new technologies such as AI or IT, the companies that have introduced them must stay in the market and those without them would exit. Is this how the whole economy must go, and is this happening in Japan?

Nakajima: I think this is a natural trend that is already under way.

However, in the case of "infrastructure" services, enhanced competition encouraging smooth entries and exits could eventually end up in a decline of the quality of services. Assuming that, smooth entries and exits must happen under a strongly growing economy.

# JS: Will regulatory reform also be important in promoting this?

Nakajima: I generally support regulatory reform, but we should bear in mind that regulatory reform without market expansion would end up in declining quality of "infrastructure" services. This must be avoided. One example is legal service. We had a regulatory reform in this area in order to increase the number of lawyers, but it has caused a decline in the quality of lawyers' services, while the number of lawyers has increased. With insufficient need for lawyers in Japan, many lawyers today, even though they spent much time studying at a law school to pass the exam to qualify as a lawyer, cannot be assured of a sufficient salary. This trend is now starting to reduce the number of lawyers today.

Another example is schools. Regulatory reform to increase the number of schools has been implemented and this has resulted in creating large numbers of low-quality colleges that cannot attract many students and instead has brought about a decline in the academic abilities of those college students.

I would like to repeat that we will need market expansion itself in order to achieve market mechanism or competition policies that work well. Otherwise, free entry to the market will always result in a decline in the quality of services. In particular, in areas like education or legal services, increased entries would result in a decline in quality because of possible moral hazards on the side of producers. I think there would be a market failure in these areas which would make regulatory reform useless. We should be very careful about adoption of regulatory reform, depending on the service sector.

JS: There is another view on competition and growth. Promoting competition by regulatory reform and other means could encourage economic growth. Would this not be relevant to specific service sectors like "infrastructure" services?

Nakajima: I think that argument would not be relevant to certain service sectors, such as the cases I have mentioned, since market failure could easily happen in those sectors. The service industry is different from the manufacturing industry in terms of the nature of the market. It is exposed to information asymmetry on the quality of the service provided. Another example of this is the restaurant service sector, which is exposed to serious competition with such frequent entries and exits. Restaurants often cannot earn enough profits. There could be some earning profits by producing high-quality service, but they are exceptions. Most of them are tired of excessive competition by cost cutting and the whole sector is not growing because of it.

JS: So would it be important to measure the quality of services to encourage competition for improved

#### quality?

Nakajima: Yes, certainly. Competition to enhance quality would probably result in product differentiation and eventually growing profits in the service sector. We would need to create a market in which we measure the quality of service by price.

JS: Measuring the quality of administration and accounting in a company would also be a difficult task. But without it we cannot raise a worker's incentive to work hard. Appropriate measurement of the quality of those services reflected in the salary system would be crucial to raising a worker's enthusiasm and productivity. In that sense, it is not only the service sector but also corporate management that faces this challenge.

Nakajima: Yes. Today we see one company in Japan producing industrial machines for semiconductors adopting a system to price all the administration services in a company. There would be more orders in a company to an administration worker providing highquality service and his or her salary would increase. Though it may be difficult to create such a market in a large company, it would definitely be a way of making the quality of service marketable.

In promoting this system, perhaps the key is to balance productivity and human relations in a company. Between workers with good performances and those with not so good performances, there could be conflicts.

# **Promoting Internationalization of Services**

JS: Trade in services could be enhanced by adoption of strengthened international rules for it. Would this lead to a rise in productivity in the service sector?

Nakajima: Yes. Since it is increasingly difficult for the service industry in Japan to survive solely by depending upon the Japanese domestic market under zero or low growth, its key marketing strategy must be to target markets anywhere in the world with high growth potential. In particular, in the case of "infrastructure" services closely interconnected with the manufacturing industry in Japan, it would be important to pursue profits not only in Japan but also all over the world, since the manufacturing industry's business activities are globalized and the share of profits obtained by those Japanese manufacturing companies' overseas subsidiaries is significantly increasing. Lawyers' offices, for example, whose most important customers are manufacturing companies, are seriously looking for overseas clients such as Japanese subsidiaries of manufacturing companies.

JS: Tourism in Japan is considered having high growth potential today because of the significant growth in inbound tourism. Could the core of our typical tourism industry, namely hotels, achieve a rise in productivity by raising the capacity utilization rate with demand from foreign tourists equalized over a vear?

Nakajima: Yes. The demand gap between the busiest moments and otherwise could create the largest inefficiency in the service sector, including tourism. The high concentration of transportation systems in Tokyo could create another inefficiency. In regional areas in Japan, we have many fewer passengers than in Tokyo. We should definitely pursue decentralization of service facilities to modify such inefficiencies.

JS: We should create new tourist plans to prepare for 2020 when we stage the Tokyo Olympics and Paralympics and expect a further significant increase in inbound tourism. For example, we could create the concept of a round trip over the whole nation, attracting foreign tourists visiting Tokyo to go to the regions as well. This would be possible, as it would be easier to achieve a consensus at the time of the Olympics when everyone is expected to promote Japan unanimously. Thus we could equalize demand for tourism over a year. What do you think?

Nakajima: Yes, that might be a good idea. That could also mitigate the concentration of business functions in Tokyo. We do not know what may happen unless we try it.

# **Enhancing Policy Discussions**

JS: Finally on the question of statistics on services, do we need evidence-based policies and should we discuss such statistics for the benefit of these policies?

Nakajima: Yes. We would need two kinds of statistics, one for financial accounting and the other for managerial accounting. The former is represented in GDP, an overview of the balance sheet of the annual economic activities of the whole nation. We would need the latter to be used for evidence-based policies to improve the economic performance of certain sectors or activities. On services, we would need statistics that include the value of what is marketable and based upon the indigenous characteristics of Japanese business culture and customs. Otherwise it would be meaningless to discuss international comparisons of service productivity simply based on statistics such as GDP divided by man hours. Such a simple-minded discussion could lead us to adopt the wrong policies.

In order to avoid this, policy analysts and statisticians should work together and agree on what kind of statistics we would need to formulate a relevant policy for improving the performance of the Japanese service industry. JS

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