

Security Services in Japan's Corporate Service Price Index (CSPI)

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1 Introduction

Since 1991, the Bank of Japan has produced the Corporate Service Price Index (CSPI) for capturing the price movement of services traded among companies, whose data have been available since 1985. The CSPI covers around 60 percent of the total value of intra-companies service transactions. The services excluded from the CSPI are mainly imputed interest and wholesale and retail trade. Security services are included in the CSPI; they are simply called "security services," and belong to the major group "other services." The weight of "security services"—1.84 percent of the total CSPI—is not very large, but it has an important role as a price component of the CSPI.

This paper introduces the category of security services in the CSPI. In Section 2 we overview the security service industry in Japan. We then explain the coverage and survey methodology of our price indexes in Section 3, and quality adjustment methods in Section 4. In Section 5 we survey the recent price movement.

2 Overview of Security Services in Japan¹

Table 1 shows some figures of security services in the end of 2004. The number of establishments providing security service is 9,247, a decrease of 6.6 percent from 2000. By service type, resident guard services and transportation guard services are quite popular; many security service firms in Japan provide them. Alarm monitoring services, armored car services for delivering or receiving valuable items, and management services for parking lots are also provided by the service providers. Those services correspond to class codes 8523, 8524, and 8525 in the CPC version 1.0.

The number of employees working at these establishments is 474,922. In contrast to the total number of establishments, which has been decreasing, the number of employees has increased almost every year. As a result, the number at the end of 2004 is 12.3 percent larger than that of 2000. Although temporary workers representing 21.5 percent of the total slightly decreased, a 16.7 percent increase in regular workers contributed to the increase of the total.

The sales amount of security services in Japan is 3,445 million yen (= 31.3 million dollar) in 2004, a 40.8 percent increase from 2000. As shown in Graph 1, security services have rapidly grown in recent years, which reflects the increase in the need for security services among companies, especially since the tragedy of September 11, 2001.

3 Security Services in the CSPI

3.1 Coverage

Security services are provided to prevent accidents and to minimize the amount of accident damage to protect persons and property. Samples of "security services" in the 2000 base CSPI are, by and large, classified into four categories: resident guard services, alarm monitoring services by security equipment set in the targeted facility, management services for parking lots, and armored car services for delivering or receiving valuable items such as money. Neither investigation services nor security services provided by governmental agents are included in the security services of the CSPI.

3.2 Price Survey Procedure

¹ The figures quoted in this section are based on the statistics on security services released from the National Police Agency.

Samples are selected purposively as representative transactions. Specifically, we select representative security firms and ask them to select some representative transactions with transaction partners fixed according to the CSPI categories above mentioned. We then collect monthly data of actual transaction prices from those firms by mail.

4 Quality Adjustment Methods

In sample replacements in “security services,” we employ quality adjustment to produce accurate price indices, just as with other price indices. In some cases, old samples and new samples cannot be compared, but there are other cases in which we can use the production cost method or the overlap method for quality adjustment.

Let us look at an example of the production cost method. In Example 1, the price for resident security service for guarding an office building is determined by manpower and area to be guarded. Suppose that, while the price for guarding is reduced from US\$2,436 to \$1,985, the correspondent company reports that the number of guards defined by the contract decreases from six to five, and the cost is reduced by \$406. In this case, we treat the difference between the actual new price, \$1,985, and the quality adjusted new price, \$2,030, obtained from the price of old price of \$2,436 minus the decrease in cost (\$406), as the pure price change.

(Example 1) -- Unit: U.S. dollar

	Old	New	Price change (%)
Current price	2,436	1,985	--
Change in cost	406	--	--
Quality adjusted price	2,030	--	-2.2

Needless to say, we do not always obtain the exact cost information corresponding to the quality change by the correspondent companies' reports. However, considering that security services heavily depend on manpower, the cost difference may be easily calculated based on personnel costs. In sample replacements it is worth asking correspondent companies the cost difference between the old contract and the new one.

Another example is the case using the overlap method for quality adjustment. In example 2, the contract of resident security service with company A expires, and the sample price is replaced with the other contract with company B. Although the price of the new sample, \$4,200 per month, is much lower than the old one, \$4,430 per month, so long as the responding firm tells us that the price difference has been stable in the past, we can regard the price difference as that of quality. Therefore, such adjustment keeps the same index level as before. The overlap method is applicable to cases in which the two services coexist simultaneously, in which the transaction volume of both products is stable, and in which those prices can be regarded to move in the same way.

(Example 2) -- Unit: U.S. dollar

	Old	New	Price change (%)
Current price	4,430	4,200	--
Price difference caused by the quality change	230	--	--
Quality adjusted price	4,200	--	0

5 Characteristics Price Development

The price development of the security service mostly reflects the change in the labor cost at the service-providing companies, and its price index has been continuously decreasing since the base year under the deflationary pressure on service prices by clients and the intentional efforts in reducing costs at the service providers, all of which contributes to the decrease of all items in the CSPI. Its decreasing rate, however, has lessened in the current years. This reflects the fact that severe demand for the service price reduction by client firms has weakened in line with the recent economic recovery.

The price also had a characteristic movement that changes when the contract was renewed (once a year or less).²

6 Concluding Remarks

As mentioned in Section 2, security services in Japan have grown in recent years. Today we regard the CSPI as an appropriate index for grasping the actual price movement of security services. We must, however, continue to pay attention to business trends in security services and pick up representative services in a timely and efficient manner. And further, we must continue to challenge ourselves in capturing transportation guard service prices, which have not been included in our samples so far.

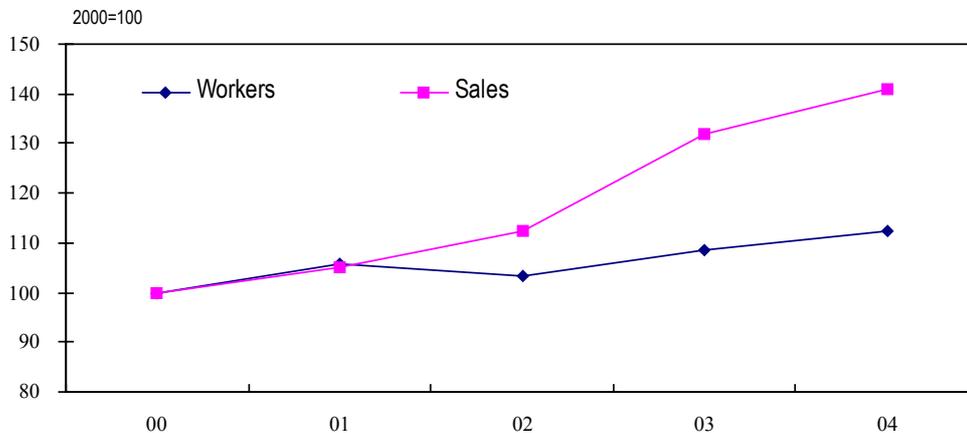
Table 1 Security services industry in Japan

	2000	2004
Establishments	9,900	9,247
Employees	422,851	474,922
Regular	319,512	372,773
Temporary	103,339	102,149
Sales (yen)	2,446 billion	3,445 billion

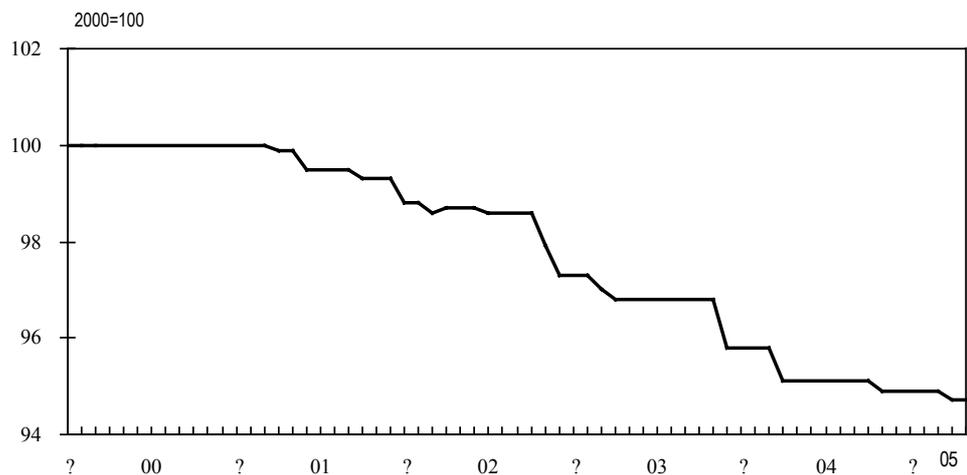
² For services other than the alarm monitoring services, the contract is, in most of the cases, renewed every April. For the alarm monitoring services, the contract is renewed on the occasion of the replacement of the equipments which occurs less frequently.

Security Services

(1) Sales and Workers



(2) Development of the Price Index 'Security Services'



(3) Development of the Price Index 'Security Services'

