

September 19, 2003

## **Progress Report**

The Bank of Japan compiles three price indexes: the Corporate Goods Price Index (CGPI), the Corporate Service Price Index (CSPI), and the Input-Output Price Index of Manufacturing Industry by Sector (IOPI). After the Voorburg meeting at Nantes in 2002, we revised the Wholesale Price Index (WPI) from a 1995 base to a 2000 one, and renamed the WPI the CGPI in December 2002. Moreover, we also began the revision work of the CSPI from a 1995 base to 2000, and published the revision plan in May 2003.

### **1. Revision of the CGPI (former WPI) from the 1995 base to 2000 in December 2002**

The revision is the largest ones in 20 years. On the BOJ website (<http://www.boj.or.jp/en/index.htm>) at the statistics corner, the explanation for this revision—known as the *Revision of the Corporate Goods Price Index* (CGPI, 2000 base)—is now available. The main points of the revision are as follows:

#### **1) Renaming the “Wholesale Price Index” the “Corporate Goods Price Index”**

The name of the index has been changed from the “Wholesale Price Index” to the “Corporate Goods Price Index,” mainly because the percentage of prices surveyed at the production stage has been increased from that under the previous index. We have selected the name—the Corporate Goods Price Index—to better reflect the character of the index, which is focused on the prices of goods traded among companies, compared with the previous name, the “Wholesale Price Index.”

#### **2) Strengthening the Deflator Function—Minor Change in Principle of Stage for Price Survey**

On the condition that the supply-demand conditions of transactions among companies are keenly reflected in the prices in both the wholesale and producer stages, we select the producer stage to increase its share on surveying the price data from the 2000 base index, while we select the wholesale stage on the current 1995 base index. This helps to strengthen the deflator function of this index.

### **3) Measures to Cope with the Diversification of Products and Their Prices**

#### **(1) Expansion of the Number of Price Data**

To cope with the diversification of products and their prices that reflect customized needs and that are accelerated by the development of information technology, the number of price data increased from 4,902 to 8,264 (as of October 2002).

#### **(2) Careful Adoption of Averaged Prices as Price Data**

Averaged price data (sales divided by sales quantities) are introduced within the bounds of ensuring constant quality. This is because, where transaction conditions are highly segmented, products are made-to-order, or actual prices are reflected in the rebate but not the nominal prices, it is hard to capture the true price development by surveying the nominal price data under strictly fixed conditions.

#### **(3) Change of Commodities to Reflect the Structural Changes in the Japanese Economy**

The selected commodities are changed to reflect the structural changes in the Japanese economy. The number of newly introduced commodities in the CGPI is 135; that of abolished commodities in the CGPI is 128. The total number of selected commodities in the CGPI is 1,407.<sup>1</sup>

#### **(4) Expansion of the Application of the Hedonic Regression Method**

The application of the hedonic regression method is further expanded for quality adjustment of servers (PC servers and UNIX servers) in the CGPI. This method was originally used for personal computers, mainframe computers, and magnetic disk alleys from the index of January 1990 on the 1990 base. From the index of January 2001 on the 1995 base, this method has been expanded to applications for video cameras and digital cameras, while abolished that for mainframe computers and magnetic disk alleys.

### **4) Introduction of Reference Index**

#### **(1) Introduction of the Chain-weighted Index as a Reference Index**

To supplement the weakness of the Laspeyres index, we introduce a chain-weighted index as a reference index. (The main index is the Laspeyres index.) Our chain-weighted index adopts the chain-weighted Laspeyres formula, which is the weighted arithmetic mean based on the chained value-based weights at upper classification levels (i.e., index compilation levels above the commodity level), while it adopts the weighted geometric mean to compile the commodity index from sample prices (i.e., the first index compilation level).<sup>2</sup>

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<sup>1</sup> “Commodities” are the indexes, which are at the lowest classification level, published as the index series of the CGPI.

<sup>2</sup> “Sample prices” are the price data, which are collected from correspondent companies to compile the indexes at

## **(2) Introduction of Index Excluding the Consumption Tax as a Reference Index**

To analyze the supply-demand conditions of the economy, we introduce the price index excluding the impact of the consumption tax, which was introduced in 1989 and raised in 1997, as a reference index.

## **5) Introduction of Preliminary Index and Change of Monthly Release Date**

To reduce the burden of reporting companies and also to improve the accuracy of the index, from the beginning of January 2003 we have changed the release date from the “sixth working day of the month after the index is compiled” to the “eighth or ninth working day of the month after the index is compiled” and have started to release the preliminary index of the CGPI in advance and revise it one month later.<sup>3</sup>

## **2. Revision of the CSPI from the 1995 Base to 2000 in Late 2004**

The revision plan is described in detail in the paper presented at the 18<sup>th</sup> Voorburg Group Meeting –Tokyo 2003, “Revision Plan of the Corporate Service Price Index (CSPI).” The main points of our revision plan are as follows:

### **1) Basic Strategy of the Revision**

Our basic strategy for the revision of the 2000 base CSPI is divided into three main points. First, by focusing on several sectors that are influenced by the recent structural changes in the economy, we will reorganize the items of the CSPI.<sup>4</sup> Second, to incorporate the diversification of services and their prices, we will conduct a wide review of sample prices, with the aim of grasping the reality of diversified price movements quickly and accurately.<sup>5</sup> Third, we will endeavor to reduce the reporting burden. For this purpose, if possible, we will use databases provided by private companies in collecting sample prices of some items.

### **2) Revision of Items**

In our revision plan, we plan to reorganize the CSPI items and focus on the sectors that have been influenced by the “IT revolution” and the accelerating deregulation of the past five years. Our priority is specifically given to reviewing six main groups: "information services," "communications," "overland freight transportation," "passenger transportation," "financial services," and "real estate rental."

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the classification level “commodity” of the CGPI.

<sup>3</sup> The release date of the CGPI is the “eighth working day of the month after the index is compiled,” except when the March and September preliminary indexes are released (i.e., when the periodic retroactive revisions of published indexes are implemented twice a year in April and October). The release date of the March and September preliminary indexes are the “ninth working day of the month after the index is compiled.”

<sup>4</sup> “Items” are the indexes, which are at the lowest classification level, published as the index series of the CSPI.

<sup>5</sup> “Sample prices” are the price data, which are collected from correspondent companies to compile the indexes at the classification level “item” of the CSPI.

### 3) Revision of Sample Prices

There are four points to consider in the revision of sample prices. First, we will not only adopt new services and corresponding sample prices, but also review the services and corresponding sample prices already adopted in the 1995 base CSPI. Second, on the process of introducing new services and dividing items, we will increase the number of sample prices to maintain the CSPI accuracy. Third, in response to the diversification of prices, we will collect a wide range of discounted prices. Fourth, we will examine the further adoption of averaged prices within the bounds of ensuring constant quality as sample prices for several items.

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