(Box 4) Developments in Administered Prices and Housing Rent in the CPI

Administered prices and housing rent, both of which have a substantial weight in the CPI, have long been slow to increase and have not shown noticeable improvement since the launch of QQE, amid the steady rise in prices of goods and general services (Box Chart 5 [1]).³¹ Among Japan, the United States, and Germany, Japan showed the smallest rise in fiscal 2015 in terms of the year-on-year rate of change in the CPI for all items excluding food and energy. This is due largely to the fact that the rises in administered prices and housing rent in Japan are smaller than those in the United States (Chart Box 5 [2]). One of the factors behind the sluggish rise in administered prices and housing rent in Japan is somehow attributable to the difference in inflation expectations toward prices in general, such that inflation expectations are not anchored at 2 percent in Japan. In addition, the following factors that are unique to administered prices and housing rent in Japan can account for the different moves in their prices.

One of the reasons why the rise in administered prices in Japan has been sluggish compared to those in Europe and the United States is that government subsidies for supplementing revenues are constantly injected to public enterprises and administered prices do not sufficiently reflect operating expenses and depreciation costs of equipment (Box Chart 6 [1]).³² On the contrary, in Europe and the United States, governments directly intervene only to a marginal extent in the process of setting administered prices; independent regulatory commissions have authority over setting administered prices that is not based on receiving subsidies while taking account of their cost structure (Box Chart 6 [2]). Assuming that public enterprises will raise charges to eliminate their operating losses, with the aim to achieve fiscal consolidation by fiscal 2020, it is roughly estimated that administered prices should be raised at a pace more than 1.5 times higher than the actual price increase since fiscal 2010, which is 0.9 percent annually (Box Chart 6 [3]).

³¹ Administered prices in fiscal 2014, however, temporarily rose at a higher rate, due in part to downsizing the various measures for discounting the highway toll.

³² For details, see "Administered Prices in Japan: Institutional Comparisons with Europe and the United States," Bank of Japan Review Series (2016-E-9).

When it comes to housing rent in Japan, one factor that makes it hard to envisage a rise in rent is that private housing rent in the CPI does not incorporate a quality adjustment to housing for rent in terms of deterioration from aging. If one keeps living in the same housing for rent and continues to pay the same rent every year, the degree of "inconvenience" a resident has to suffer will go up every year, along with the continued deterioration in the quality of the housing. Suffering such an inconvenience is virtually equivalent to accepting a price increase every year. In the United States, a price index for housing rent incorporating quality adjustment is compiled, assuming that such inconvenience is regarded as a price increase. In Japan, if a quality adjustment in terms of deterioration from aging is taken into account, housing rent will be relatively higher than the currently published price index.³³ Another factor is that the increase in construction of housing for rent that is motivated by inheritance tax savings has led to a further rise in the already high vacancy rate of housing for rent, and this has generated downward pressure on private housing rent. These two factors are both applicable to private housing rent, for which the weight in the CPI (all items less fresh food) is only 2.8 percent. However, as private housing rent is applicable to imputed rent, for which the weight is 16.2 percent in the CPI, its impact on the CPI as a whole is non-negligible.

³³ The issue of a quality adjustment of housing rent in terms of deterioration from aging was noted at the Statistics Commission in 2015 as an important agenda item in improving the accuracy of the CPI (for details, see the minutes of 88th to 91st Statistics Commission and those of 57th to 60th Service Statistics and Corporate Statistics Section meeting, available in Japanese only). Based on the discussions at these fora, the Statistics Bureau of the Ministry of Internal Affairs and Communication is supposed to publish the outcome of research including estimation results at the earliest possible time in fiscal 2017, to continue to make further considerations from a broad perspective, and to provide information.

Developments in Administered Prices and Housing Rent

(1) Breakdown of CPI (Less Fresh Food and Energy)



Notes: 1. Administered prices consist of public services and water charges.

- 2. Figures for the CPI (less fresh food and energy) are calculated by the Research and Statistics Department, Bank of Japan.
- 3. Figures for the CPI are adjusted to exclude the estimated effects of changes in the consumption tax rate.

(2) Breakdown of CPI (Less Food and Energy): Japan, United States, and Germany



(b) FY 2015



Notes: 1. Administered prices in the U.S. consist of items classified as "regulated" by Dexter et al. (2002).

2. Administered prices in Germany are those in the Harmonised Index of Consumer Prices (HICP).

3. Figures for Japan are adjusted to exclude the estimated effects of changes in the consumption tax rate.

Sources: Ministry of Internal Affairs and Communications; HAVER; Dexter, Levi, and Nault (2002) "Sticky Prices: The Impact of Regulation," *Journal of Monetary Economics.*

Administered Prices in Japan

- (1) Revenues from Charges and Operating Expenses of Public Enterprises in Japan
- (2) Share of Items whose Prices Are Directly Set by the Government (Fully Administered)



Note: Public enterprises here consist of local public enterprises operating water and sewage services, hospitals, nursing care services, and transportation. For details of the classification and calculation methods, see "Administered Prices in Japan: Institutional Comparisons with Europe and the U.S.," Bank of Japan Review Series (July 2016). The same applies to the charts below.

(3) Administered Prices in the Counterfactual Assuming Public Enterprises Had Started to Raise Charges in Order to Restore Their Financial Health by FY 2020



(b) Changes from the Previous Year

(c) Assumptions for the Counterfactual Estimation

(a) Level of the Price Index

(1) For each public enterprise, the rate at which it would have to raise charges is estimated by calculating the additional revenue from charges that would be required to eliminate by FY 2020 the deficits in FY 2010 and thereafter, where subsidies to cover the deficit are not considered as revenue. In the estimation, it is assumed that raising charges at the required rate does not affect demand.

(2) The counterfactual price index is obtained by adding the required increase in charges to the price index for the relevant item.

Note: Administered prices in (3) exclude expressway tolls, public high school fees, and charges for electricity and manufactured & piped gas. Figures are adjusted to exclude the estimated effects of changes in the consumption tax rate.

Sources: Ministry of Internal Affairs and Communications; Eurostat, etc.