

30<sup>th</sup> Voorburg Group Meeting Sydney, Australia September

# Voorburg Group Cross cutting issue on bundling

Comments on section papers –



Aki Ono

Bank of Japan Research and Statistics Department



### Bundling services in Japanese SPPI

There are two combinations of bundling.

- 1. Service and Service
- ◆ 1-1. Pure bundling
  - ✓ Primary service and Secondary service (Core service and characteristics)
- ◆ 1-2. Mixed bundling(Composite services)
  - ✓ A combination of independent services
  - 2. Services and Goods





### Pure bundling and Mixed bundling

When Service A and Service B are grouped together and provided as a group,

- ✓ Service B is available only when purchasing Service A.
- (= Service B is dependent on Service A)
  - → "Pure bundling"
- ✓ Service A and Service B can be available separately.
  - → "Mixed bundling"





### Pure bundling and Mixed bundling

- Case1: Service B is available only when purchasing Service A
  - → Service A: Primary service, Service B: Secondary service
  - → "Pure bundling"
  - Ex.) "A: Hotel services, B:Linen supply services,"
    - " A: Fixed telephone services, B: Call forwarding services"
- Case 2: Both Service A and Service B are available separately
  - → "Mixed bundling"
  - Ex.) "Office space rental and Parking space rental,"
    - "Building cleaning services and Security services"





### Pure bundling



- ✓ When Service A and Service B are bundled together and offered, the use of Service A is required for utilizing Service B.
  - → Service A: primary service, Service B: secondary service
  - → "Pure bundling"
  - Ex.) Hotel service (Service A) and Linen supply service (Service B) are bundled and provided together. However, you will never get access to the linen supply service for accommodation without staying at a hotel.
  - → Hotel service is primary and Linen supply service is secondary.





# Pure bundling (cont.)

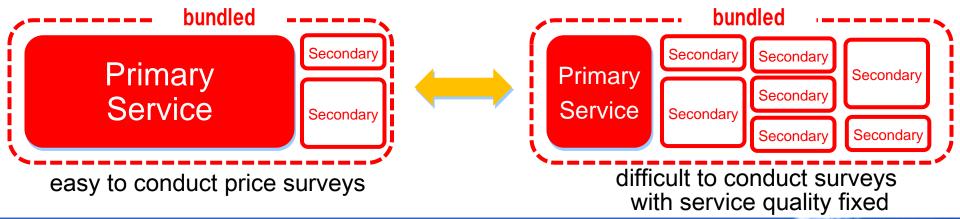
- ✓ For the price survey, the bundled price should be followed as the price for primary Service A. On the other, Service B is regarded as the part of characteristics of Service A.
  - Ex.) Hotel service (Service A) and Linen supply service Service B)
    - The entire accommodation fee rises because of the increasing cost of linen supply service due to oil price hike, while the charge for lodging remains unchanged.
  - → In this case, the price increase should be reflected for the index of "Hotel service"(= primary service).





### Difficulties in price survey for Pure bundling

- ✓ When the correspondence relationship between primary service and secondary service is clear and defined, it is relatively easy to conduct price surveys.
- ✓ However, when secondary services are increasingly tied with primary service and as a result, the variety and quality of secondary services become diverse, it is difficult to survey prices in practical. In other words, it becomes more difficult to follow pure price changes with service quality fixed.





### Difficulties in price survey for Pure bundling(cont.)

#### Ex.) Japanese wholesale services

Wholesale services involve the resale goods to other businesses and acting as an agent or broker in buying and selling. In Japan, businesses provide whole services (= primary service), along with various secondary services such as warehousing, advertisement, and marketing.

- → Therefore, it is extremely difficult to survey prices of wholesale services with quality held constant.
- → On a trial base, the BOJ keeps track of margins to measure prices, in particular the margin per unit (the difference between the sale price and the purchase price of a product). However, the quality changes have not been adjusted in this method.





### Mixed bundling



- ✓ When Service A and Service B are bundled and provided, Service A and Service B are available separately.
  - → "Mixed bundling"
  - Ex.) Office space rental (Service A) and Parking space rental (Service B) are bundled and sometimes discounted. But customers are able to utilize each service separately.
- ✓ Unlike Pure bundling, it is difficult to identify primary service.





#### 日本銀 BANK OF JAPAN

## Mixed bundling(cont.)

- ✓ For Mixed bundling, it is more complicated to survey prices.
- 1. Should the price reduction due to bundling be reflected in the price indexes?
  - → It should not be reflected because this reduction is a kind of quantity discount (= altered transaction selling terms)?
  - → If we regard it as a pure price change, how to reflect it?
  - Practically, it is hard to know in what proportions customers buy the bundles or buy the single component.





### Mixed bundling(cont.)

- 2. How can bundled prices be followed continuously?
  - → If all parts of the bundle are in the same product classification, all representative types of services
    - ( = Service A,B, A and B) should be surveyed.
  - → If Bundling service is a combination of products across different classification, it would be more difficult to handle.
- ✓ We have not come to the conclusions whether the price change due to Mixed bundles should be reflected in price indexes.
- ✓ The BOJ assumes the discount by bundling Service A and Service B results from the change in transaction terms (=quality change) and does not reflect it in the price indexes.





## Mixed bundling(cont.)

- Ex.) Office space rental and Parking space rental Assume the case where "Office space rental A" is replaced by "Office space rental A + Parking space rental B." Single service is no longer available.
  - Single price Office A = 3,000dollars,
     Parking B = 500dollars
  - Bundled price Office A + Parking B = 3,300dollars
- → The BOJ does not reflect the total discount because the price change is caused by purchasing multiple services, that is, the change in transaction term. In this case, the sample is reviewed or replaced by others.





# How can bundled prices be followed?

- ✓ When Bundled services are in the same product category, the prices of simple and bundled services should be followed simultaneously.
  - Ex.) In case of print newspaper and electronic newspaper, three types of services, "paper," "electronic version, " and "paper & electronic version" should be covered.





# How can bundled prices be followed? (cont.)

- ✓ When bundling service is a combination of products across different product classification, the BOJ deals with it as follows.
  - 1. For the Bundled services, ask respondents to provide unbundled prices for the individual services.
    - Ex.) When Building cleaning services and Security services are provided as a group, respondents are asked to split the prices into constituent parts for each service, based on the cost estimation or detailed breakdowns (= using production cost approach).
  - 2. (If 1. is impossible,) Exclude from price collection.





# How can bundled prices be followed? (cont.)

- ✓ If bundled transactions are prevalent and become more dominant in the industry, relevant product category should be reviewed and integrated.
- → In the integrated product category, simple and bundled services are tracked together from one period to the next.





## **Bundling of Services and Goods**

- ✓ Services and goods are bundled and sold together as well.
- ✓ One example is copy machines and maintenance services. Another example is electric generators in a power plant and plant maintenance services. On the whole, some businesses ship goods at a low price, focusing on earning revenue from subsequent relevant services.
- ✓ Goods and services are provided at different periods, so unbundled prices are easy to follow.





# Bundling of Services and Goods(cont.)

- ✓ However, they have great influence on price determination each other. So if goods and services are sold together as a group by a specific provider, it is desirable to survey these prices from the same one. The BOJ selects samples taking this point into consideration.
  - Ex.) Company A discounts the price of copy machines, while raises maintenance fee with a view to maximizing its revenue.
  - → Ask Company A to report the prices of both "copy machines" and of "maintenance service for copy machines," and then reflect them to the indexes respectively.

