SPPI for Securities brokerage and related services in Japan

Aki Ono
Bank of Japan
Research and Statistics Department
The Japanese SPPI covers financial services for enterprises, excluding households.

In the Japanese SPPI, there are 11 Items related to financial services.

This presentation will focus mainly on securities brokerage and related services that correspond to those defined in ISIC 6612.
### Input-Output Table

<table>
<thead>
<tr>
<th>Sector Name</th>
<th>Group/Subgroup Items</th>
<th>Weights</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial service</td>
<td>Financial service (commission), public</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Domestic money transmission and receipt</td>
<td>4.3</td>
</tr>
<tr>
<td></td>
<td>International money transmission and receipt</td>
<td>0.7</td>
</tr>
<tr>
<td></td>
<td>Account services</td>
<td>4.6</td>
</tr>
<tr>
<td></td>
<td>Securities brokerage services</td>
<td>3.5</td>
</tr>
<tr>
<td></td>
<td>Underwriting services</td>
<td>1.7</td>
</tr>
<tr>
<td></td>
<td>Securities selling services</td>
<td>8.4</td>
</tr>
<tr>
<td></td>
<td>Securities issuance, transfer and related services</td>
<td>1.5</td>
</tr>
<tr>
<td></td>
<td>Financial agency services</td>
<td>0.5</td>
</tr>
<tr>
<td></td>
<td>Credit guarantee</td>
<td>4.0</td>
</tr>
<tr>
<td></td>
<td>Interchange fees for credit card and electronic</td>
<td>2.5</td>
</tr>
<tr>
<td></td>
<td>ATM interchange fees</td>
<td>1.3</td>
</tr>
<tr>
<td>Financial service</td>
<td>Financial service (commission), private</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Securities brokerage and related services</td>
<td></td>
</tr>
</tbody>
</table>
Definition of the services

✓ Security brokerage services
e.g.) Stock brokerage and intermediaries

✓ Underwriting services
e.g.) underwriting industrial bond, investment-and-loan bond, municipal bond

✓ Securities selling services
e.g.) raising and selling investment trust fund

✓ Securities issuance, transfer and related services
e.g.) issuing corporate bonds and associated financial transaction processing activities

Tokyo Stock Exchange in Japan
Weights and aggregation

- Weights are calculated using industry turnover data with two main sources for aggregation.
  - For the Groups, Intermediate transaction value estimated in the Input-Output Tables are used.
  - For the Items (=categories at the lowest level), other statistics published by industry organizations, such as "Japanese Bankers Association" and "Japan Securities Dealers Association".

- These weights are updated every five years.
- The current base year is 2010CY.
Sample design

✓ Samples are selected based on the sales of the companies and the services they provide ("judgmental sampling").

✓ Prices are collected mainly from securities companies, major banks, local banks, and trust banks.

• Despite a huge variety of financial services, it is difficult to obtain so many sample prices. In Japan, financial services are provided by limited qualified institutions, so the Bank has to care about reducing their response burden.

✓ Data are collected from respondents on a monthly basis.
Specification of the service

✓ There are many price determining characteristics;

• Type of securities (corporate bonds, municipal bonds, government debt, domestic and foreign equities, ETFs, options, futures, etc.)

• Type and size of clients

• Nominal value of traded securities

• Time to maturity (15-year loans, 5-year certificate of deposit)

• Trading volume etc.
For securities brokerage and related services, "value based commissions" are common in Japan. Therefore, prices are mainly surveyed by combination of Model pricing and Percentage fee method.

To set the model services, three components should be specified.
1. The nominal value of traded securities
2. The percentage fee charged for commission
3. The inflation rate of general prices
Pricing methods (cont.)

Price calculation

Price = (2) Commission rate (%) × (3) Inflation rate index (CPI)

- During the respondent initialization process, respondents specify (1) nominal value of traded securities.
- In the subsequent months, respondents update only (2) commission rate.
- The staff member of the Bank updates (3) inflation rate.
e.g.) Securities brokerage service 15-year loan
Nominal value of securities : 1 million yen
Client : Trust bank A

<table>
<thead>
<tr>
<th>Time</th>
<th>Nominal value of traded securities</th>
<th>Commission rate</th>
<th>Inflation rate</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1 million yen</td>
<td>5%</td>
<td></td>
<td>5,000,000 yen</td>
</tr>
<tr>
<td>1</td>
<td>1 million yen</td>
<td>9%</td>
<td>3%</td>
<td>9,270,000 yen</td>
</tr>
</tbody>
</table>

In Japan, (2) commission rate tends to stay flat with transaction terms fixed. That is why maintaining the long relationships is the highest priority for the Japanese companies.
Price indexes

Tax hike in April 2014
Quality Issues

✓ For securities brokerage and related services, several quality issues lie in compiling the SPPI. Following are two major issues;

1. Bundled services

2. Definition of unit transactions
Many of the large securities companies provide their clients with a wide range of services such as the provision of investment advice and financial planning services, which are classified in other categories.

e.g.)
Security brokerage + Investment advice = $3,300 / month
Primary services are usually specified clearly. By contrast, various secondary services are usually tied with a primary service, and yet are not defined clearly.

The Bank supposes the proportion of secondary services is relatively small considering Japanese business practice and related statistics.

- According to Economic Census (2014)*, the sales of primary services for finance accounts for more than 90%.

* Ministry of Internal Affairs and Communications, Ministry of Economy, Trade and Industry
In addition, the variety and proportion of secondary services are differential depending mainly on clients. The Bank assumes the variety and proportion of secondary services for a specified client are held constant for a long term.
The Japanese financial institutions have strong relationships with clients, especially with those in the same affiliated group. They tend to provide same services including bundles in the long-term.
The Bank specifies primary services for a specified client in order to keep the quality of services constant.

Surveyed prices for primary services can be effected by price and quality changes of relevant secondary services. However, the Bank assumes the impact of secondary services of security brokerage services is limited.
As stated in the methodological guide for SPPI by Eurostat-OECD (2014), the definition of unit transaction will have an impact on the volume measurement.

There are three approaches in which the unit transaction could be defined.

1. The nominal value of trades securities
2. The number of traded securities → U.S. and Korea
3. The real value trade securities → Japan
In the Japanese SPPI, changes in the real value traded securities are reflected in the volume measurement.

- In order to hold the real value of traded securities constant, the inflation rate of general prices is used. In this approach, increases in general prices result in deterioration in the quality of provided services.

The inflation rate reflecting changes in monetary value has a great impact on the SPPI.

- At present, "CPI for All items, less fresh food, seasonally adjusted" is used to reflect the inflation rate.
The SPPI will be rebased from the current 2010 base to 2015 base in a couple of years. In the process, the Bank plans to consider how to deal with quality issues.

The Bank also tries to maintain compatibility with the SNA establishment concept by continuing the discussions with the relevant institutions at home and abroad.
Thank you for your attention

Aki Ono
Price Statistics Division
Research And Statistics Department
BANK OF JAPAN
Email: aki.ono@boj.or.jp