

29<sup>th</sup> Voorburg Group Meeting  
Dublin, Ireland  
September 23<sup>th</sup>

## **Rebasing the Services Producer Price Index to the Base Year 2010**

---

**Bank of Japan  
Research and Statistics  
Department  
Aki Ono**



# Index

---

- 1 Outline of Services Producer Price Index
- 2 Key points of the revision
- 3 Overview of the 2010base index
- 4 Trends of the 2010base index

# 1 Outline of Services Producer Price Index

# Outline of Services Producer Price Index

- The Bank of Japan compiles the Services Producer Price Index (SPPI), which covers services that are provided by businesses to other businesses and to the central and local governments in Japan.
- The index is published every month. Time-series data can be obtained through "BOJ Time-Series Data Search" on the BOJ website.
- The Bank revises the reference period (base year) every five years, in years that end "0" or "5" based on the Statistics Act. At the timing of revision, (1) the base year is changed, (2) the weights are revised to the base year, (3) new services are incorporated, (4) pricing methods and quality adjustment methods are improved.

**2**

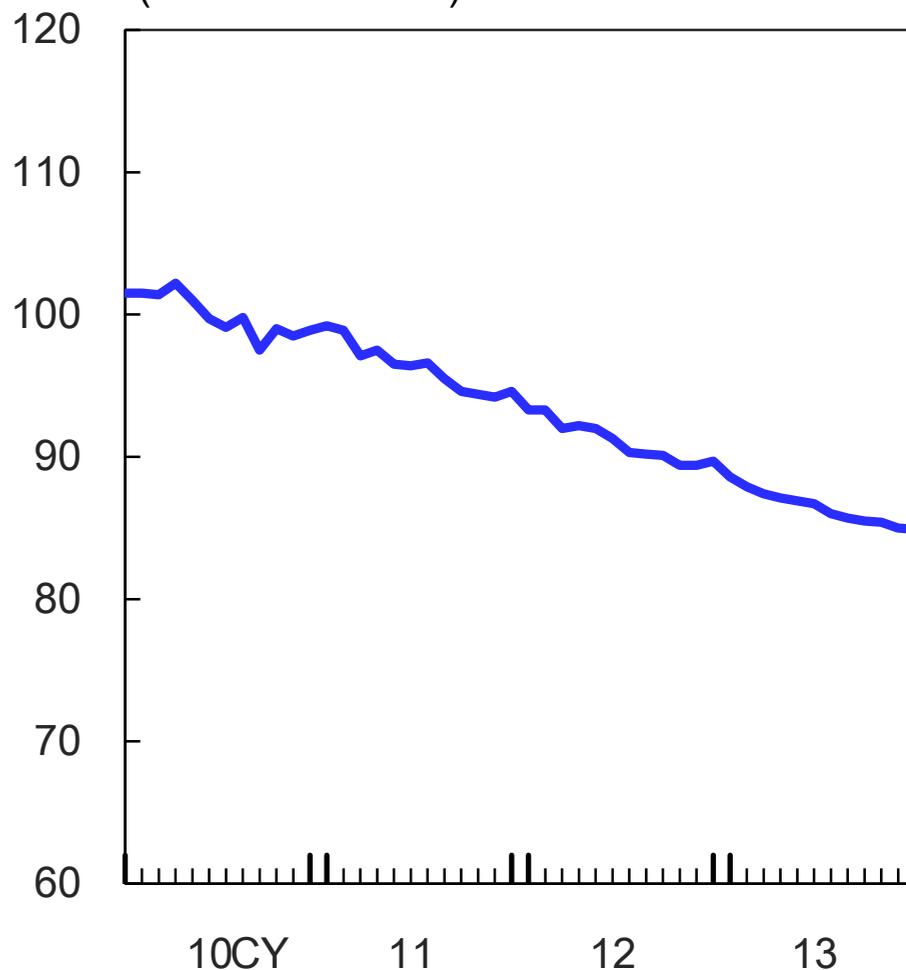
Key points of the revision

# Incorporation of new services

- In order to reflect the changes in the Japanese economic structure, the 2010 base index incorporates several new services.
- Take "ASP" for example. ASP, which is short for Application Service Provider, is the service utilizing cloud computing technology.
- The index on a quality-adjusted basis gradually declines.

## ■ "ASP"

( CY2010 = 100 )



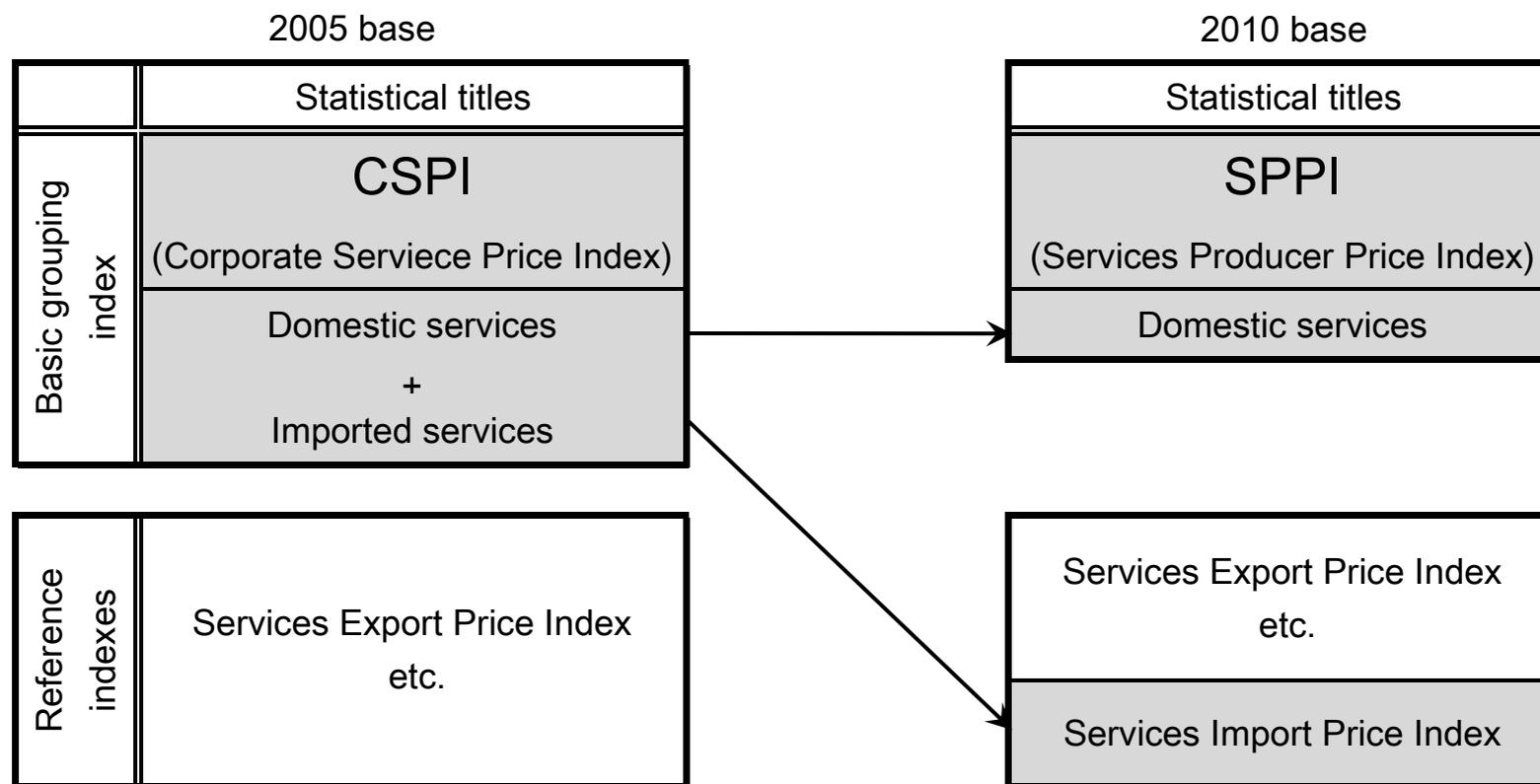
## Improvements in the pricing methods and quality adjustment methods

---

- The Bank improves pricing methods and quality adjustment methods.
  - ✓ "Model prices" are reviewed in the Subgroup "International air passenger transportation" and in the Item "Cellular phone services and PHS services."
  - ✓ In order to reduce the burden of reporting companies, external data sources are introduced in the Item "Advertising in traffic facilities" and "Underwriting services."
  - ✓ Quality adjustment methods are improved (such as the Item "Newspaper advertising").
  
- The pricing methods and quality adjustment methods are always reviewed to accurately measure the price changes over time.

# Changes in the index structure and statistical title

- The market covered by the Basic grouping index : domestic + import → [domestic](#)
- The English title : Corporate Services Price Index → [Services Producer Price Index](#)



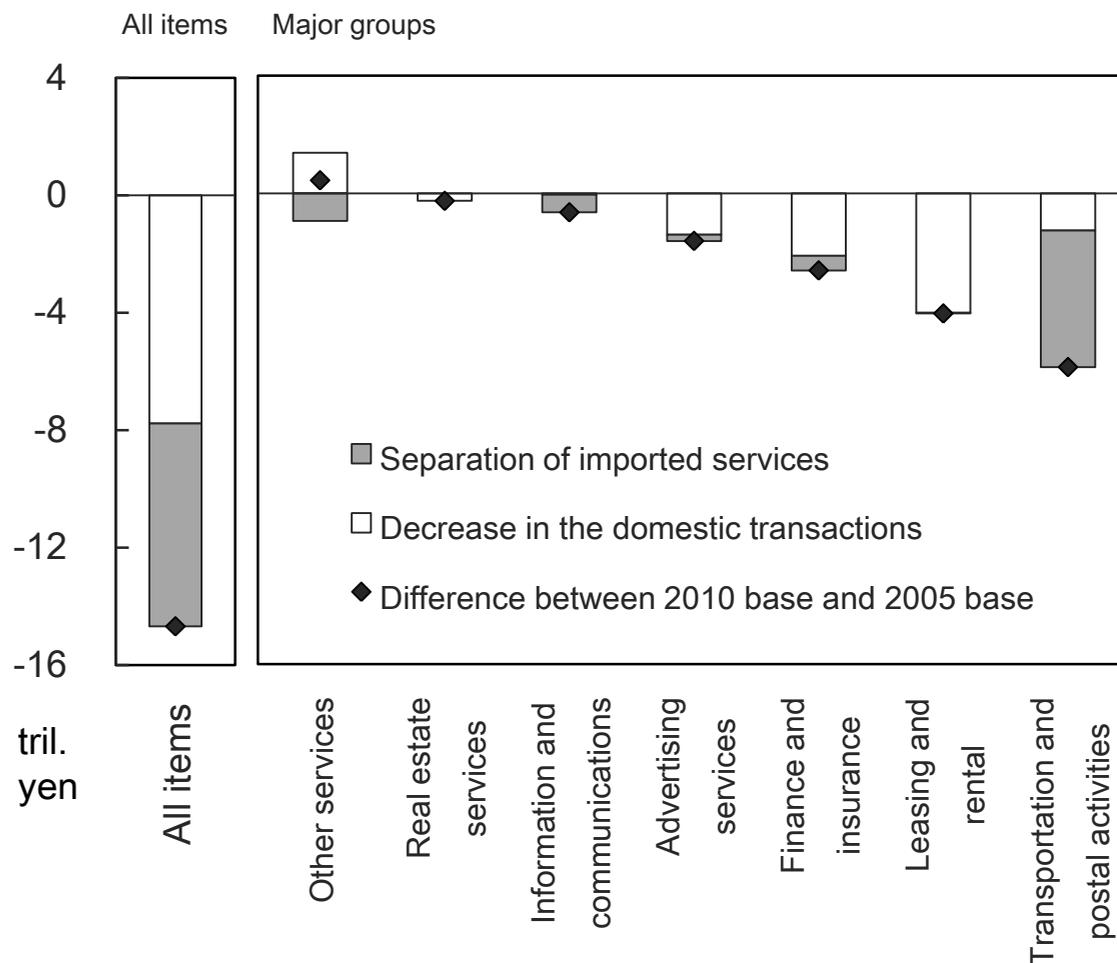
3

Overview of the 2010 base index

# Weights

- The weights are revised based on the value of domestic transaction among businesses during the base year.
- The total transaction value used in the calculation of weights in the 2010 base decreases by 15 trillion yen compared to the 2005 base.

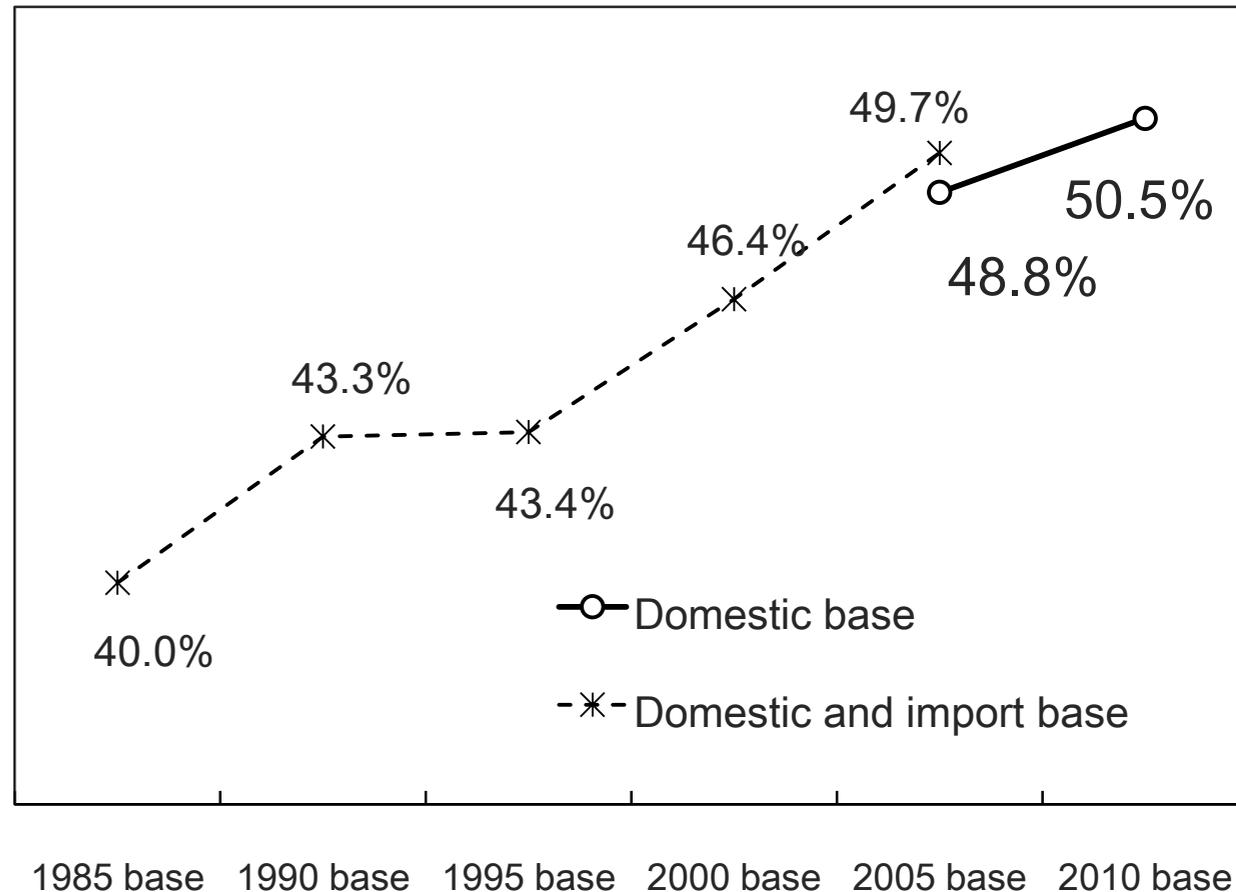
- Changes in the total transaction values used in the calculation of weights



# Coverage

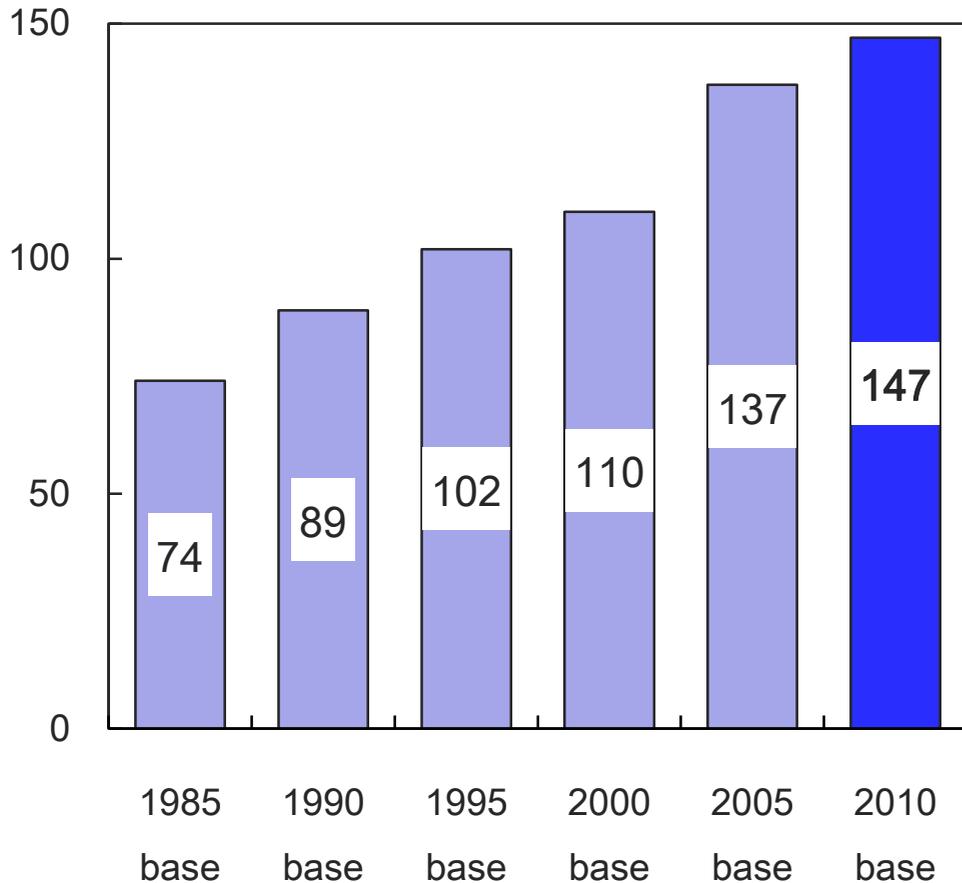
- The coverage of the 2010 base index increases to 50.5% from 48.8% for the 2005 base index (domestic base) after excluding imported services.

## ■ Coverage

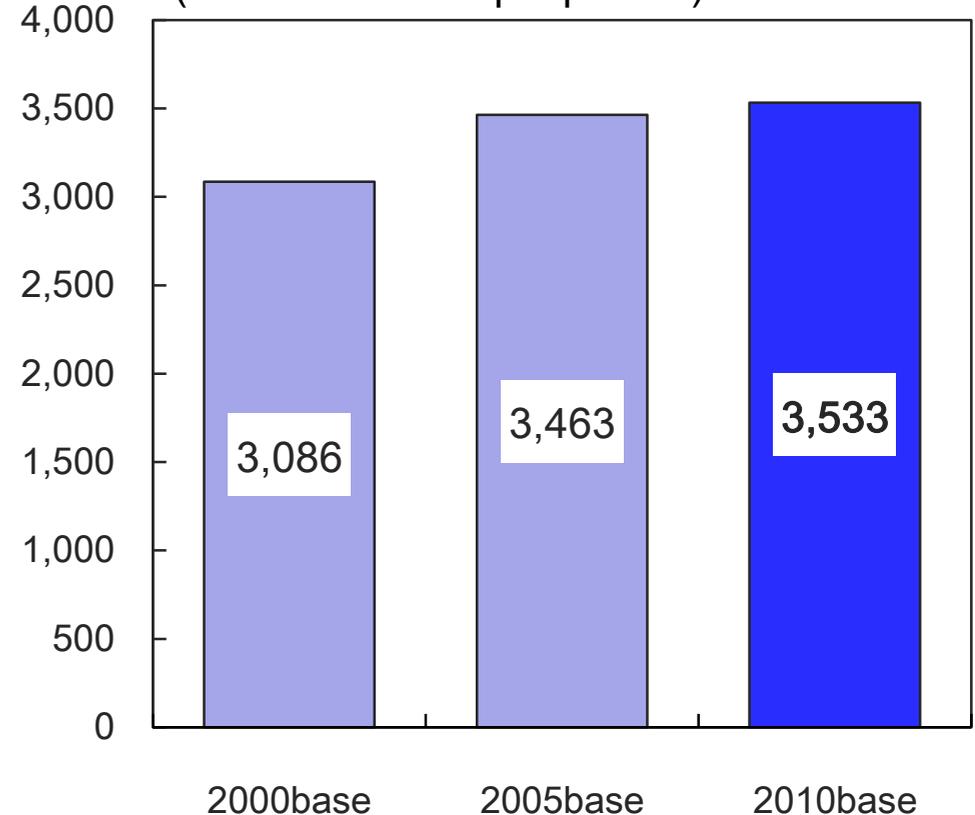


# Number of Items and sample prices

■ Number of Items\*  
( Number of Items )



■ Number of sample prices\*\*  
( Number of sample prices )



\* The number is based on the Basic grouping index.

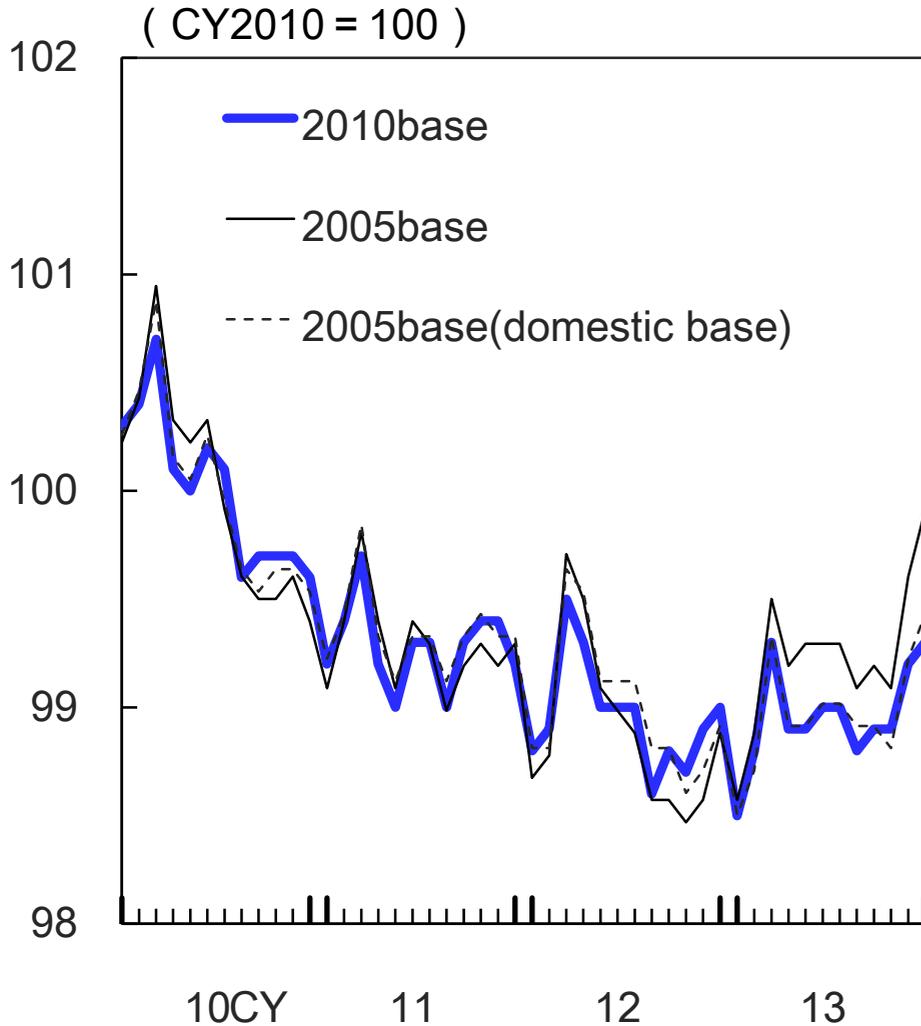
\*\* The numbers include sample prices in the Reference indexes.

4

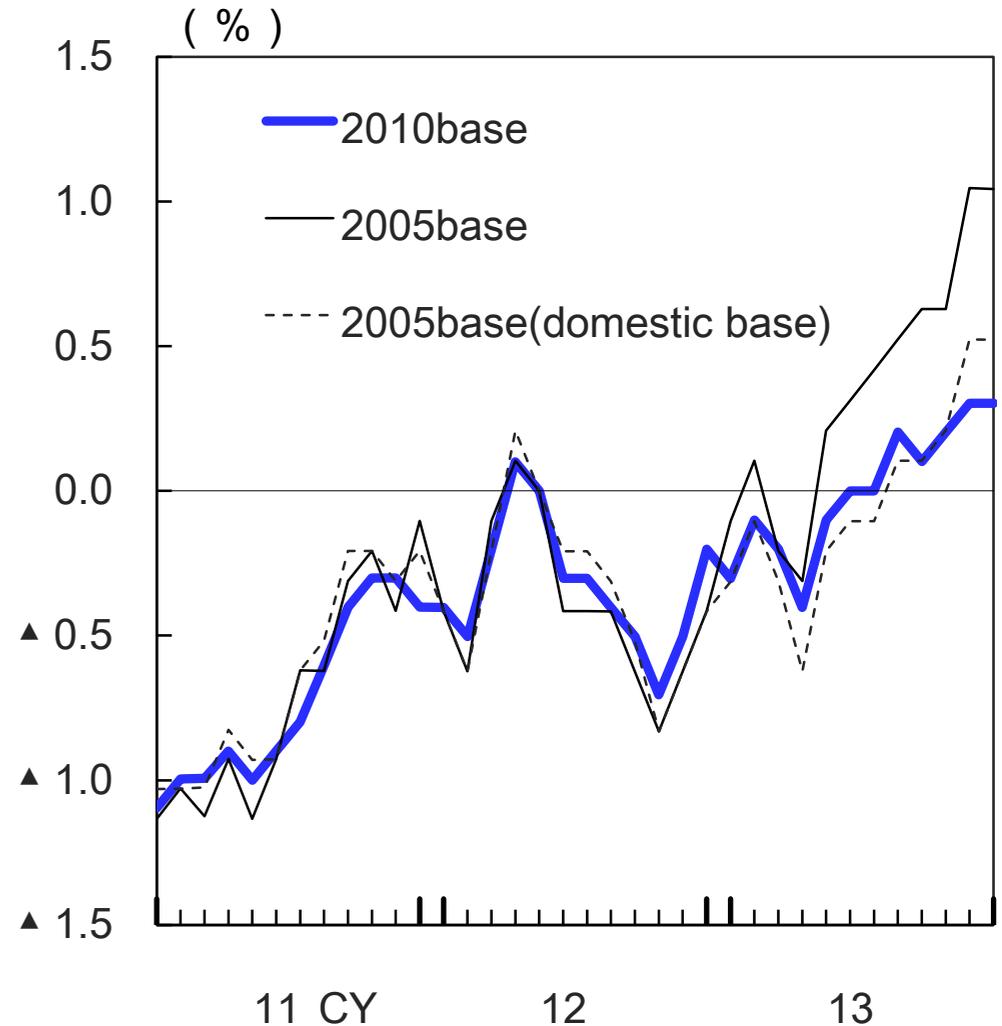
Trends of the 2010 base index

# Comparison of the new and old base indexes for "All items"

## ■ Indexes



## ■ Year-on-year changes



## Comparison of the new and old base indexes for "All items"

---

- The 2010 base index generally shows the same trend as the 2005 base index.
- However, looking at both indexes in details, the 2010 base index falls short of the 2005 base index from 2013 onwards. This is mainly due to the separation of imported services that are susceptible to the impact of devalued yen from the Basic grouping index in the 2010 base index.
- The 2010 base index and the 2005 base index after excluding imported services (domestic base) are almost the same.