Price Statistics Compilation in 196 Economies: The Current Status

33rd Meeting of the Voorburg Group, Rome
September 24-28 2018
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The IMF’s key roles

- **Economic Surveillance**
  
  *Provide advice to members on adopting policies that can help them achieve macroeconomic stability*, thereby accelerating economic growth and alleviating poverty.

- **Lending**
  
  *Make financing temporarily available to member countries* to help them address balance of payments problems, which include circumstances in which they find themselves short of foreign exchange because their external payments exceed their foreign exchange earnings.

- **Capacity Development**
  
  *Offer technical assistance and training to countries*, at their request, to help them build and strengthen the expertise and institutions they need to implement sound economic policies
  
  ✓ including price statistics.

(IMF 2017 Annual Report)

Goal: reliable price statistics

- Essential for informed policy-making and IMF surveillance
- Reference for inflation targeting
- Reference to adjust wages, pensions, social benefits, etc.
- Needed for robust estimates of real GDP
Capacity Development for Price Statistics

- **Capacity development**
  - Technical assistance missions and training activities
  - Assist countries in identifying priorities, addressing data gaps, improving quality, promoting data dissemination, monitor progress
  - Methodological soundness, weights, coverage, timeliness, classification

- **Analysis based on technical expertise of staff**
  - 1,200 TA/training activities in last two decades
  - Regional TA centers (108 economies)
  - Targeted projects supported by external donor
  - Joint IMF-OECD questionnaire (43 economies)
CPI and PPI compilation: Timeliness

CPI (196 economies)
- Monthly, within 1 month: 86%
- Quarterly, within 1 month: 4%
- Quarterly, delay > 1 month: 3%

PPI (126 economies)
- Monthly, within 1 month: 68%
- Quarterly, delay > 1 month: 14%
- Monthly, within 1 quarter: 9%
- Less frequently: 6%

CPI and PPI compilation: Classifications

CPI: COICOP
- COICOP: 76%
- Other: 24%

PPI: ISIC
- ISIC Rev.4: 54%
- ISIC Rev.3: 13%
- ISIC: 8%
- Other: 25%
CPI and PPI compilation: Coverage

**CPI: Geographical Coverage**

- **Advanced Economies (37)**
  - National 33 (89%)
  - Urban 4 (11%)

- **Emerging and Developing Economies (159)**
  - National 93 (58%)
  - Urban 35 (22%)
  - Capital city 31 (20%)

**PPI: Industrial Coverage**

- **Advanced Economies (35)**
  - MMU 37%
  - <MMU 23%
  - >MMU 40%

- **Emerging and Developing Economies (91)**
  - MMU 42%
  - <MMU 28%
  - >MMU 30%
CPI compilation: Weights

Age of CPI Weight Reference Period

All Economies (196)

- Less than 5 years: 38%
- 5 - 10 years: 42%
- 11 - 15 years: 16%
- Older than 15 years: 4%

Advanced Economies (37)

- Less than 5 years: 74%
- 5 - 10 years: 26%

Emerging and Developing Economies (159)

Inflation Targeters (50)

- Less than 5 years: 44%
- 5 - 10 years: 36%
- 11 - 15 years: 14%
- Older than 15 years: 6%

Non-Inflation Targeters (109)

- Less than 5 years: 22%
- 5 - 10 years: 22%
- 11 - 15 years: 18%
- Older than 15 years: 38%
PPI compilation: Weights

Age of PPI Weight Reference Period

All Economies (126)
- Within 5 years: 36%
- 5 - 10 Years: 46%
- Older than 15 years: 9%

Advanced Economies (35)
- Within 5 years: 57%
- 5 - 10 Years: 43%

Emerging and Developing Economies (91)
- Inflation Targeters (46)
  - Within 5 years: 35%
  - 5 - 10 Years: 11%
  - Older than 15 years: 6%
- Non-Inflation Targeters (45)
  - Within 5 years: 20%
  - 5 - 10 Years: 15%
  - Older than 15 years: 18%
CPI: digitalization and quality adjustments

IMF-OECD survey on price compilation practices, August 2017 (43 replies)

CPI: COICOP divisions with prices collected from e-commerce

<table>
<thead>
<tr>
<th>COICOP division</th>
<th># of economies</th>
</tr>
</thead>
<tbody>
<tr>
<td>09 Recreation and culture</td>
<td></td>
</tr>
<tr>
<td>07 Transport</td>
<td></td>
</tr>
<tr>
<td>05 Furnishings, household equipment and routine household maintenance</td>
<td></td>
</tr>
<tr>
<td>12 Miscellaneous goods and services</td>
<td></td>
</tr>
<tr>
<td>08 Communication</td>
<td></td>
</tr>
<tr>
<td>11 Restaurants and hotels</td>
<td></td>
</tr>
<tr>
<td>03 Clothing and footwear</td>
<td></td>
</tr>
<tr>
<td>06 Health</td>
<td></td>
</tr>
<tr>
<td>04 Housing, water, electricity, gas and other fuels</td>
<td></td>
</tr>
<tr>
<td>01 Food and non-alcoholic beverages</td>
<td></td>
</tr>
<tr>
<td>10 Education</td>
<td></td>
</tr>
<tr>
<td>02 Alcoholic beverages, tobacco and narcotics</td>
<td></td>
</tr>
</tbody>
</table>

CPI: e-commerce is covered (number of economies)

<table>
<thead>
<tr>
<th></th>
<th>Prices</th>
<th>Weights</th>
<th>None</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domestic e-commerce</td>
<td>30</td>
<td>33</td>
<td>10</td>
</tr>
<tr>
<td>Cross-border e-commerce</td>
<td>12</td>
<td>22</td>
<td>21</td>
</tr>
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</table>
CPI: digitalization and quality adjustments

IMF-OECD survey on price compilation practices, August 2017 (43 replies)

CPI: sharing economy services are included

CPI: quality adjustment method

- Bridged overlap
- Judgmental
- Hedonics
- Option cost
- Direct comp.
- Consumer profiles
- Imputation
- No quality adjustment
- Matched models

# economies

- Implicit method
- Explicit method
## PPI: digitalization and quality change

**IMF-OECD survey on price compilation practices, August 2017 (43 answers)**

### PPI: e-commerce is covered (number of economies)

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<td>13</td>
<td>18</td>
<td>18</td>
</tr>
<tr>
<td>Cross-border e-commerce</td>
<td>7</td>
<td>11</td>
<td>25</td>
</tr>
</tbody>
</table>

### PPI: inclusion of sharing economy services

- **Yes**: 5%
- **No**: 95%

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**Real Sector Division**
**IMF Statistics Department**
PPI: digitalization and quality adjustments

IMF-OECD survey on price compilation practices, August 2017 (36 answers)

PPI: quality adjustment method

- Bridged overlap
- No quality adjustment
- Judgmental
- Hedonics
- Matched models
- Option cost
- Direct comp.
- Imputation
- Show no change
- Consumer profiles

# economies

Explicit method
Implicit method
## Conclusions

### CPI
- Compiled almost universally, monthly, timely
- Fairly well aligned with international standards
- Inflation targeting developing countries meet the goals more often
- Main issues identified
  - 36% lack national coverage
  - 62% with outdated weights

### PPI
- Compiled by 126 economies (60%)
- Fairly well aligned with international standards
- Inflation targeting countries meet the goals more often
- Main issues identified
  - 32% cover less than MMU
  - 64% with outdated weights
Conclusions

IMF-OECD questionnaire: main findings (43 replies)

- **New goods/services:** majority of sample follows market developments in a timely manner and introduces new goods and services when significant

- **Disappearing goods/services:** majority of sample takes into account the quality change and makes adjustments using several recommended methods

- **E-commerce:** 77% of sample includes e-commerce in CPI and 51% in PPI

- **Sharing economy:** only a small part of the sample includes the sharing economy in the CPI or PPI
CPI Manual Update
Forthcoming


RPPI Practical Guide
Forthcoming
Price Statistics Compilation in 196 Economies: The Relevance for Policy Analysis

Forthcoming

The Status of GDP Compilation Practices in 189 Economies and the Relevance for Policy Analysis

CPI Reporters Database
http://data.imf.org/cpi

- Pick a country (map or drop-down menu)
- Select the section you want to view (total index, 12 COICOP, metadata)
- View the Indexes and Weights page under Data & Metadata tab

The map includes data reported monthly. Other countries report data quarterly.

(developed by the IMF, in collaboration with the OECD)
Thank you!

Comments welcome

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