Reporting on inflation

A new approach in the Netherlands

Jan Walschots
Geneva 8 May 2018
The use of the Consumer Price Index has developed over time

In the old days, the CPI was developed to measure the cost of living of consuming households,

In the past decades, the use of the CPI as a monetary measure of inflation has become ever more important

In Europe, the HICP is the ECB leading indicator for inflation and for monetary policy
Definition of inflation

Inflation is a sustained increase in the general price level.

What is a general price level and how can it be measured?
“Inflation” at Statistics Netherlands

Before 2000: “inflation” was a term not used by CBS. The correct term was “the annual rate of change of the Consumer Price Index”

Somewhere around 2000: “inflation” was defined as “the annual rate of change of the (national) CPI.”

From June 2017: There is no longer one “inflation” outcome.
Reason for the change

CPI is an important measure of inflation,
- Consumption may be considered the ultimate goal of the production process
- CPI is a rapid indicator,

However, it is not a complete measure of inflation.
Three months of very low inflation

From the past decade, I selected three months where the annual rate of the CPI became close to zero:

My question to you is, do you consider that these three moments have a comparable inflation situation?
Which of these three periods would indicate the largest risk of a deflationary period?
Annual rate of CPI 2007/07-2009/07
Annual rate of CPI 2013/01-2015/01
Annual rate of CPI 2014/07-2016/07
The person who sees low inflation of consumer prices may also be interested in buying a house.

The price of houses is not included in the CPI, but buying a house may be the most important expenditure decision in a person’s lifetime.

My question to you is, how do you consider the inflation situation if you know both the CPI and house price developments?
Annual rates 2007/07-2009/07

CPI
House prices
0
Annual rates 2014/07-2016/07

- CPI
- House prices
- 0
From inflation rate to an inflation dashboard

– Rather than publishing one inflation rate, based on the CPI, CBS publishes an inflation dashboard combining 17 indicators
– Based on existing price index series
– We do not aggregate to one overall outcome
Why this new approach

– Different players in the economy experience different “inflation”: consumers, enterprises, investors including homeowners, players on financial markets.
– Price developments in various markets are very asynchronous.
– Focus on one index series may give an erroneous view on overall inflation.
Which price index series are included?

There are four groups in price index series included in the dashboard:

- Consumption
- Production
- Fixed assets
- Financial Markets
Which price index series are included?

Included is: CPI

For each group we selected four series:

Consumption:
- Food, alcohol and tobacco
- Energy
- Non-energy industrial goods
- Services
Production:
- Wages
- Oil
- Imports of industrial products
- Exports of industrial goods

Capital market
- AEX stock exchange index
- 3-months interest rate
- 10-year government bonds
- Gold
Fixed assets
- Prices existing houses
- Production index new dwellings
- Import of machinery
- Capital goods produced in the Netherlands

The selection of series depends on availability and may change in the future.
What does the dashboard look like?

Prijsveranderingen per segment: maart 2018

Consumptie door huishoudens
- CPI Energie en brandstof
- CPI Voedingsmiddelen, dranken en tabak
- CPI Diensten
- CPI Industriële goederen excl. energie

Kapitaalmarkt
- AEX
- Driemaands rentevoet
- Goud
- Jongste 10-jarige staatslening

Productie van goederen en diensten
- Lonen
- Ruwe aardolie
- Uitvoer industrie
- Invoer industriële producten

Vastgoed en investeringen
- Bestaande koopwoningen
- Nieuwbouwwoningen
- Invoer machines
- In Nederland geproduceerde kapitaalgoederen
First overview of actual month

For each of the 17 series:
- Red indicates “high” inflation (e.g. houses)
- Yellow indicates: “average” inflation (CPI energy; wages)
- Blue indicates: “low” inflation (interest rates; CPI services)
- Upper 25% of results in past decade
- In between 25\textsuperscript{th} and 75\textsuperscript{th} percentile
- Lower 25% of results in past decade

You can choose to see this overview for each month since 2006
Inflatie-indicatoren per maand

Prijsveranderingen per segment: maart 2018
Second overview of time series

This graph shows the numbers of red, yellow and blue in each month since 2006.

Distinction between yellow above and below median

- Higher inflation: column shifts up or more red
- Low inflation: column shifts down or more blue
- Average inflation: column in the middle and more yellow
Second and more flexible version

You can choose a more extended version with possibilities to make own selections:

- Length of reference period
- Percentage of months considered red, yellow or blue

Indication of how far from average and position compared to “normal” range.
### Prijsveranderingen per segment: maart 2018

<table>
<thead>
<tr>
<th>Segment</th>
<th>Prijsindices</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Consumentenprijsindex (CPI)</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Consumptie door huishoudens</strong></td>
<td>CPI Diensten</td>
</tr>
<tr>
<td></td>
<td>CPI Energie en brandstof</td>
</tr>
<tr>
<td></td>
<td>CPI Industriële goederen excl. energie</td>
</tr>
<tr>
<td></td>
<td>CPI Voedingsmiddelen, dranken en tabak</td>
</tr>
<tr>
<td><strong>Kapitaalmarkt</strong></td>
<td>AEX</td>
</tr>
<tr>
<td></td>
<td>Driemaands rentevoet</td>
</tr>
<tr>
<td></td>
<td>Goud</td>
</tr>
<tr>
<td></td>
<td>Jongste 10-jarige staatslening</td>
</tr>
<tr>
<td><strong>Productie van goederen en diensten</strong></td>
<td>Invoer industriële producten</td>
</tr>
<tr>
<td></td>
<td>Lonen</td>
</tr>
<tr>
<td></td>
<td>Ruwe aardolie</td>
</tr>
<tr>
<td></td>
<td>Uitvoer industrie</td>
</tr>
<tr>
<td><strong>Vastgoed en investeringen</strong></td>
<td>Bestaande koopwoningen</td>
</tr>
<tr>
<td></td>
<td>In Nederland geproduceerde kapitaalgoederen</td>
</tr>
<tr>
<td></td>
<td>Invoer machines</td>
</tr>
<tr>
<td></td>
<td>Nieuwbouwwooningen</td>
</tr>
</tbody>
</table>

---
Individual series

Of course, the 17 time series of annual rates can be selected and shown individually, e.g. interest rate on 10-year government bonds:
Conclusion, further developments

- First version operational since June 2017
- Basic approach is clear
- More relevant series (more services, less oil)
- Improvement of figures
- Is exchange rate a price for the dashboard?
- Can we make one overall indicator?
Facts that matter