

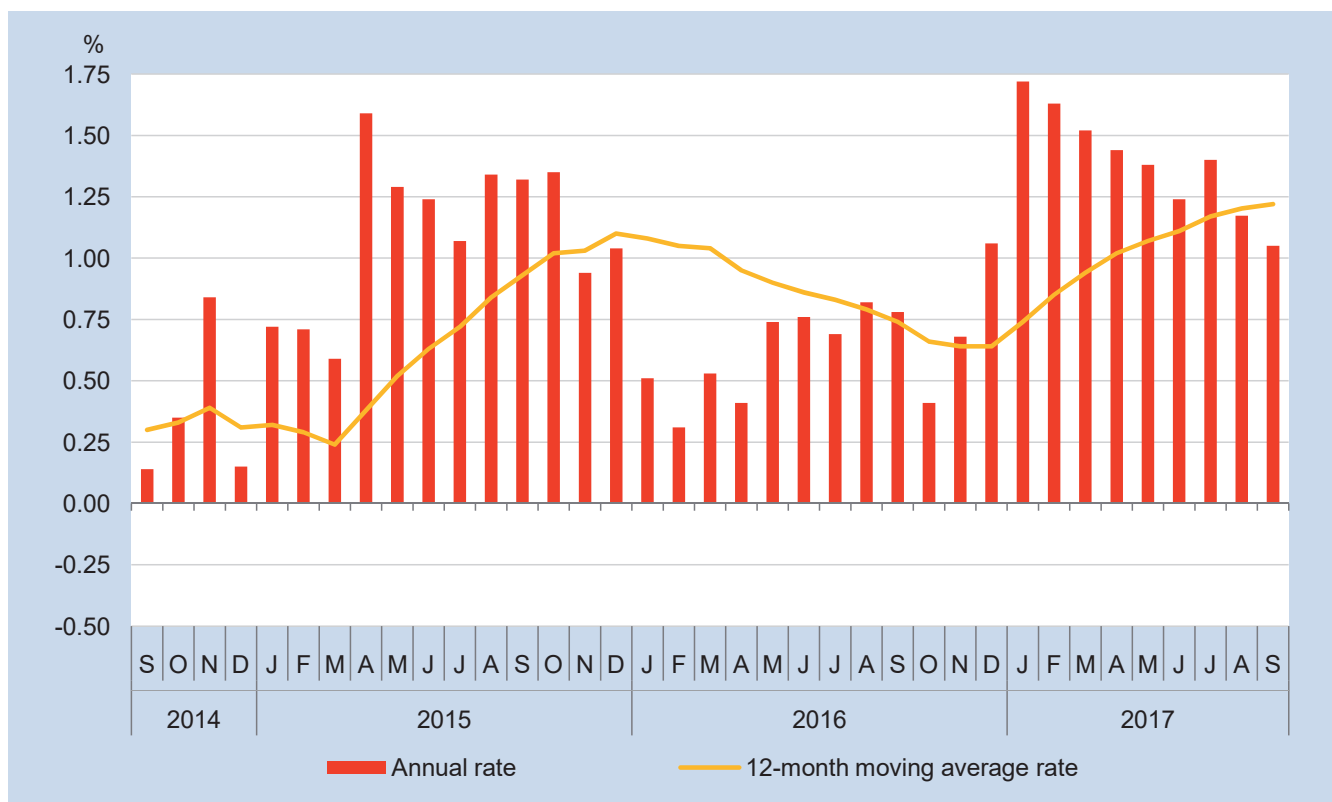
13 October 2017 | 1100 hrs | 164/2017

Retail Price Index: September 2017

1. Main points

- In September 2017, the annual rate of inflation as measured by the Retail Price Index (RPI) decreased to 1.05 per cent, from 1.17 per cent registered in August 2017.
- The twelve-month moving average rate increased to 1.22 per cent, from 1.20 per cent in the previous month (Table 2).¹
- The largest upward impact on annual inflation was registered in the Food Index (0.48 percentage points) mainly reflecting higher prices of restaurant services (including cafes and the like), while the largest downward impact was registered in the Clothing and Footwear Index (-0.21 percentage points) attributed to lower prices of garments (Chart 3).
- The Clothing and Footwear Index registered an overall annual inflation rate of -4.61 per cent, of which Clothing registered an annual rate of -7.01 per cent, while Footwear registered an annual rate of 7.41 per cent (refer to Special Aggregates table on page 4).

Chart 1. Inflation rates



¹This rate of inflation, that factors in aspects of seasonality, is widely used in Malta to make cost-of-living adjustments. It is also used to update the index of inflation in continuation of the Schedule to the Housing (Decontrol) Ordinance (CAP.158, Art.13) of the Laws of Malta, on the basis of the All Items Retail Price Index.

2.0 Overview

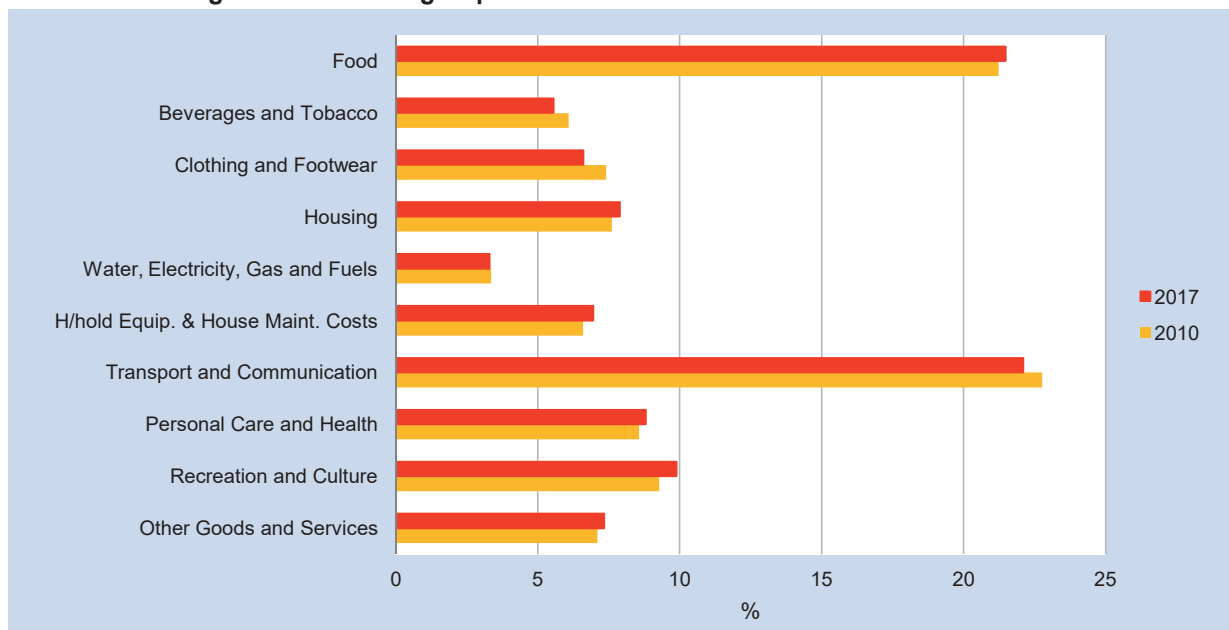
The Retail Price Index (RPI) measures monthly price changes in the cost of purchasing a representative basket of consumer goods and services, and is closely linked with the cost-of-living adjustment (COLA) increases and periodic rent payment adjustments. A closely related measure of price movements is the Harmonised Index of Consumer Prices (HICP). For a description of the differences between the RPI and the HICP, refer to page 5 of the release.

From January 2017 the RPI started being published with December 2016 as its base. The RPI basket is sub-divided into the following main groups:

1. Food
2. Beverages and Tobacco
3. Clothing and Footwear
4. Housing
5. Water, Electricity, Gas and Fuels
6. Household Equipment and House Maintenance Costs
7. Transport and Communication
8. Personal Care and Health
9. Recreation and Culture
10. Other Goods and Services

The figure below displays each main group and its relative weight in the basket of goods and services consumed by the Maltese residents. The chart also compares the 2017 weights with those introduced in 2010. As can be seen from the chart, the weights have remained relatively stable over the last seven years.

Chart 2. RPI weights for the main groups



Each monthly News Release on the RPI includes three different measures of inflation:

- i. The annual inflation rate measures average price changes between the reference month and the same month of the previous year. This measure can be influenced by one-off effects in either month.
- ii. The monthly inflation rate compares price changes between the reference month and previous month. This measure can be highly influenced by seasonal effects.
- iii. The 12-month moving average rate overcomes the volatility of the above two rates by comparing the average of the latest 12 indices to the average of the previous 12 indices. This measure is less sensitive to temporary changes in prices. Thus this rate is used for the computation of the COLA and adjustments in wages, rents, etc.

3. Price changes and effects on inflation

The highest annual rates in September 2017 were registered in the following main groups: Beverages and Tobacco (3.26 per cent) and Recreation and Culture (2.32 per cent). On the other hand, the lowest annual inflation rates were registered in: Clothing and Footwear (-4.61 per cent) and Other Goods and Services (-1.13 per cent).

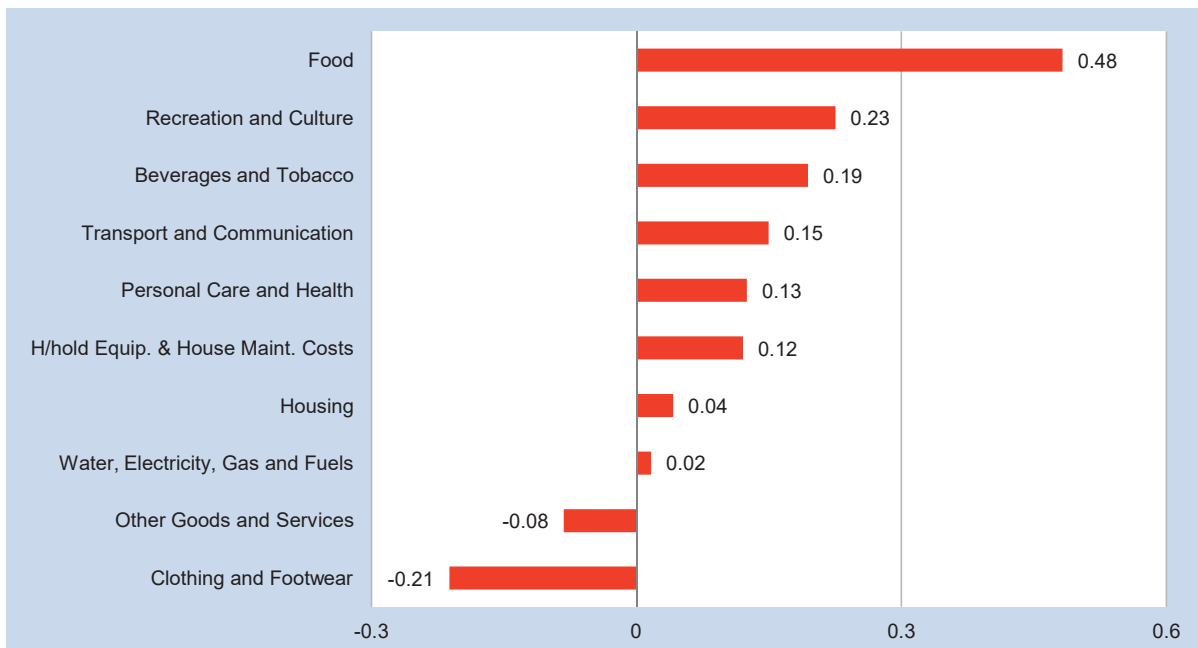
Table 1. RPI group indices
December 2016=100

| Group | Weight | Indices | | | Annual rate (%) | Monthly rate (%) |
|---|---------------|--------------|--------------|--------------|-----------------|------------------|
| | | Sep 2016 | Aug 2017 | Sep 2017 | Sep 2017 | Sep 2017 |
| Food | 21.49 | 97.65 | 99.49 | 99.82 | 2.22 | 0.33 |
| Beverages and Tobacco | 5.56 | 97.87 | 101.06 | 101.06 | 3.26 | 0.00 |
| Clothing and Footwear | 6.62 | 87.29 | 82.33 | 83.27 | -4.61 | 1.13 |
| Housing | 7.90 | 100.02 | 100.52 | 100.53 | 0.52 | 0.02 |
| Water, Electricity, Gas and Fuels | 3.31 | 100.02 | 100.50 | 100.50 | 0.49 | 0.00 |
| Household Equipment and House Maintenance Costs | 6.97 | 99.00 | 100.33 | 100.75 | 1.76 | 0.42 |
| Transport and Communication | 22.10 | 102.05 | 102.73 | 102.72 | 0.65 | -0.01 |
| Personal Care and Health | 8.81 | 99.89 | 101.13 | 101.30 | 1.41 | 0.17 |
| Recreation and Culture | 9.90 | 99.29 | 101.76 | 101.59 | 2.32 | -0.16 |
| Other Goods and Services | 7.34 | 100.99 | 100.04 | 99.85 | -1.13 | -0.19 |
| All Items | 100.00 | 98.85 | 99.74 | 99.89 | 1.05 | 0.15 |

The largest upward impacts on annual inflation were registered in the Food Index (0.48 percentage points)*, the Recreation and Culture Index (0.23 percentage points) and the Beverages and Tobacco Index (0.19 percentage points). These were mainly due to higher prices of restaurant services (including cafes and the like), cultural visits and tobacco respectively (Chart 3).

The Clothing and Footwear Index (0.21 percentage points) and the Other Goods and Services Index (0.08 percentage points) registered the largest downward impacts on annual inflation, mainly reflecting lower prices for garments and jewellery articles respectively (Chart 3).

Chart 3. Contribution to the annual inflation rate by the 10 main groups (in percentage points): September 2017



*Note that percentage points refer to the differences between two percentages.

| 4. Special aggregates (respective % weight) | | Annual rate (%) | Monthly rate (%) |
|---|---|-----------------|------------------|
| Food (21.49 %) | Food excluding restaurant services and take-aways (15.60 %) | 1.74 | 0.42 |
| | Restaurant services and take-aways (5.89 %) | 1.27 | 0.08 |
| Clothing and Footwear (6.62 %) | Clothing (5.45 %) | -7.01 | 1.81 |
| | Footwear (1.17 %) | 7.41 | -1.42 |
| Water, Electricity, Gas and Fuels (3.31 %) | Water and electricity (3.06 %) | 0.00 | 0.00 |
| | Gas and fuels (kerosene) (0.25 %) | 6.37 | 0.00 |
| Transport and Communication (22.10 %) | Transport (16.57 %) | 0.55 | -0.66 |
| | Communication (5.53 %) | 1.30 | 2.01 |
| Personal Care and Health (8.81 %) | Medical services and medicinals (4.14 %) | 1.99 | 0.39 |
| | Personal care products and services (4.67 %) | 0.84 | -0.03 |
| Recreation and Culture (9.90 %) | Sports related equipment (0.54 %) | 1.00 | 1.43 |
| | Educational fees and related expenses (2.04 %) | 4.59 | -0.08 |
| | Other recreational articles and services (7.32 %) | 1.71 | -0.29 |

Special aggregates are shown in the above table. Each aggregate refers to an important category group extracted from the RPI.

Table 2. Inflation rates by month and year

| Month | 2015 | | 2016 | | 2017 | |
|-------|-----------------|----------------------------------|-----------------|----------------------------------|-----------------|----------------------------------|
| | Annual rate (%) | 12-month moving average rate (%) | Annual rate (%) | 12-month moving average rate (%) | Annual rate (%) | 12-month moving average rate (%) |
| Jan | 0.72 | 0.32 | 0.51 | 1.08 | 1.72 | 0.74 |
| Feb | 0.71 | 0.29 | 0.31 | 1.05 | 1.63 | 0.85 |
| Mar | 0.59 | 0.24 | 0.53 | 1.04 | 1.52 | 0.94 |
| Apr | 1.59 | 0.38 | 0.41 | 0.95 | 1.44 | 1.02 |
| May | 1.29 | 0.52 | 0.74 | 0.90 | 1.38 | 1.07 |
| Jun | 1.24 | 0.63 | 0.76 | 0.86 | 1.24 | 1.11 |
| Jul | 1.07 | 0.72 | 0.69 | 0.83 | 1.40 | 1.17 |
| Aug | 1.34 | 0.84 | 0.82 | 0.79 | 1.17 | 1.20 |
| Sep | 1.32 | 0.93 | 0.78 | 0.74 | 1.05 | 1.22 |
| Oct | 1.35 | 1.02 | 0.41 | 0.66 | | |
| Nov | 0.94 | 1.03 | 0.68 | 0.64 | | |
| Dec | 1.04 | 1.10 | 1.06 | 0.64 | | |

5. Background notes

5.1 Accessing data

Further information on RPI and HICP NSO publications may be accessed from (https://nso.gov.mt/en/News_Releases/View_by_Unit/Unit_A5/Price_Statistics/Pages/Retail-Price-Index.aspx) and (https://nso.gov.mt/en/News_Releases/View_by_Unit/Unit_A5/Price_Statistics/Pages/Harmonised-Index-of-Consumer-Prices.aspx), respectively. Eurostat publications on HICP may be accessed from (<http://ec.europa.eu/eurostat/news/news-releases>)

5.2 Differences between RPI and HICP

Both indices, i.e. RPI and HICP, are compiled using a large and representative selection of more than 440 different goods and services for which price movements are regularly monitored. Around 10,000 separate price quotations are used each month to compile the Index.

The methodology behind RPI and HICP is similar, yet a few differences subsist:

- i. The RPI captures private households only whereas the HICP covers private households, institutional households (such as retirement homes) and foreign visitors to Malta.
- ii. The population base year of each index is different. The RPI is a fixed base index with weights periodically updated in line with the HBS. On the other hand, the HICP is a chain-linked index with the weights reviewed on an annual basis. Unlike the RPI where the sample of goods and services changes every time the weights are updated, newly significant goods and services can be introduced in the HICP framework on an annual basis.
- iii. The coverage of the HICP is based on an international classification system, COICOP (Classification of Individual Consumption by Purpose), whereas the RPI has a different set of codes for each group of items.

| Group | COICOP division | Weight (out of 1000) | RPI group | Weight (out of 100) |
|-------|---|----------------------|---|---------------------|
| 1 | Food and non-alcoholic beverages | 165.55 | Food | 21.49 |
| 2 | Alcoholic Beverages and Tobacco | 37.57 | Beverages and Tobacco | 5.56 |
| 3 | Clothing and Footwear | 56.78 | Clothing and Footwear | 6.62 |
| 4 | Housing, Water, Electricity, Gas and Other Fuels | 82.69 | Housing | 7.90 |
| 5 | Furniture, Household Equipment and Routine Maintenance of the House | 78.46 | Water, Electricity, Gas and Fuels | 3.31 |
| 6 | Health | 43.63 | Household Equipment and House Maintenance Costs | 6.97 |
| 7 | Transport | 139.82 | Personal Care and Health | 22.10 |
| 8 | Communication | 37.58 | Transport and Communication | 8.81 |
| 9 | Recreation and Culture | 101.50 | Recreation and Culture (including Education) | 9.90 |
| 10 | Education | 18.33 | Other Goods and Services | 7.34 |
| 11 | Restaurants and Hotels | 162.65 | | |
| 12 | Miscellaneous Goods and Services | 75.44 | | |
| | Total | 1,000.00 | Total | 100.00 |

Apart from the disparities identified above, both the RPI and the HICP:

- have the same geographic coverage, implying that both indices refer to the whole country;
- utilise the same price collection methodologies; and
- utilise the same outlet sample (with some exceptions).

5.3 Further information

Price quotations for the new items introduced in the latest RPI index series started being collected in December 2016.

All RPI indices pertaining to the years prior to 2017 were re-based to December 2016=100. This latest index series may be linked to the previous one by using a linking coefficient of 1.1199.

The basket of consumption items considered for the RPI is reviewed periodically, in line with the Household Budgetary Survey (HBS) during which information of household consumption is collected over a 12-month period in order to obtain an estimate of the average household expenditure. The information collected through the HBS exercise is then further supplemented by additional data sources to get to the final RPI weights.

The HICP is being published with 2015 as its base year. The previous series with reference 2005=100 is discontinued. Commission Regulation 2015/2010 provides the legal basis for updating the HICP reference year from 2005=100 to 2015=100. It should be noted that the re-basing operation was conducted after rounding all past indices to one decimal place. Therefore, there might be slight differences when comparing this series with past data due to rounding.

The HICP largely follows National Accounts concepts of what constitutes household consumption in determining the index scope, and mainly uses National Accounts data to weight the items in the basket.

The HICP weighting scheme is annually updated in accordance with Commission Regulation (EU) No. 1114/2010. The treatment of seasonal items is in accordance with Commission Regulation (EC) No. 330/2009.

Figures in Special Aggregates table may not add up mainly due to additivity, and the change in weights and basket of items in January 2017.

Users are advised to consult the NSO before comparing the results of the RPI and the HICP.

More information on the metadata behind HICP and RPI News Releases may be accessed from:

Statistical Concepts: (<http://nso.gov.mt/metadata/concepts.aspx>)

Metadata: (<http://nso.gov.mt/metadata/reports.aspx?id=9>)

Classifications: (http://nso.gov.mt/metadata/classificationdetails.aspx?id=COICOP_1999)

HICP and RPI Manual:

(https://nso.gov.mt/en/nso/Sources_and_Methods/Unit_A5/Price_Statistics/Documents/RPI_and_HICP_Manual.pdf)

Statistical database: (<https://nso.gov.mt/statdb/start>)

Any quotations from this news release are to be cited and/or referenced.

5.4 Publication policy

A calendar for future news releases may be accessed from the link below (https://nso.gov.mt/en/News_Releases/Release_Calendar/Pages/News-Release-Calendar.aspx).

6. Methodological notes

6.1 Reassessments / revisions

Note that the RPI series is published in accordance to the reference base December 2016 whereas the HICP series is published for base year 2015 according to Eurostat base year revisions (<http://ec.europa.eu/eurostat/documents/272892/272971/HICP+reference+year+2015%3D100>). Such revisions policy was published in November 2004 and is used for the calculation of consumer price inflation statistics (https://nso.gov.mt/en/nso/About_NS0/Documents/Annual_Reports/AnnualReport2004.pdf).

6.2 Time series

Data from 1946 is accessible from the following link: (https://nso.gov.mt/en/nso/Selected_Indicators/Retail_Price_Index/Pages/Index-of-Inflation.aspx)