Guernsey Quarterly Inflation Bulletin

Quarter 4 2016

Issue date 20th January 2017

The Guernsey Inflation Bulletin presents the Guernsey RPI and RPIX measures of inflation, based on price changes of items within a "shopping basket" of goods.



1.1 Introduction

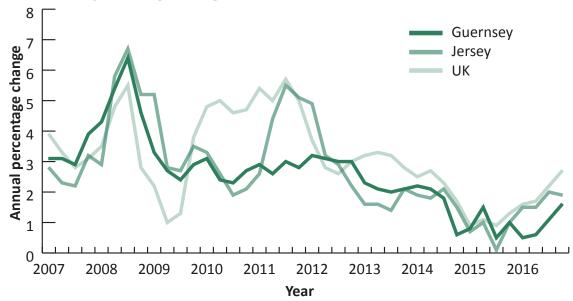
The Guernsey RPIX and RPI are measures of inflation. They measure the change in the prices of goods and services bought for the purpose of consumption or use by households in Guernsey. The indices are published quarterly by Data and Analysis. The calculations of the RPIX and RPI are based on the price change of items within a 'shopping basket'. Whilst some prices rise over time, others will fall or fluctuate and the indices represent the average change in these prices.

This is the eighth Bulletin to present Guernsey inflation figures calculated using the updated shopping basket and weights, which resulted from the 2012-13 Household Expenditure Survey. The survey is due to be repeated in 2017-18 and planning for this is underway.

1.2 Headlines

- Guernsey's annual inflation as measured by the RPIX ('core' inflation excluding mortgage interest payments) was 1.6% in December 2016. This is 0.5 percentage points higher than in September 2016 and 0.6 percentage points higher than in December 2015.
- The equivalent RPIX figure for December 2016 for the UK was 2.7%. The figure for Jersey was 1.9%.
- Housing made the largest positive contribution (0.4 percentage points) to the annual change in the RPIX for the year ending in December 2016. Nine of the fourteen groups contributed increases to the overall change.
- The 'all items' RPI annual inflation was 1.2% in December 2016, 0.3 percentage points higher than the previous quarter and 0.1 percentage points higher than in December 2015.
- The equivalent RPI figure for December 2016 for the UK was 2.5%. The figure for Jersey was 1.9%.





2.1 RPIX and RPI overview

Table 2.1.1 RPIX overview

| | | Annual % | Quarterly % | Index (1998 |
|------|-----|----------|-------------|-------------|
| | | change | change | base) |
| 2013 | Dec | 2.1 | 0.2 | 159.6 |
| 2014 | Mar | 2.2 | 1.1 | 161.4 |
| | Jun | 2.1 | 0.1 | 161.5 |
| | Sep | 1.8 | 0.4 | 162.1 |
| | Dec | 0.6 | -0.9 | 160.6 |
| 2015 | Mar | 0.8 | 1.3 | 162.7 |
| | Jun | 1.5 | 0.8 | 163.9 |
| | Sep | 0.5 | -0.7 | 162.8 |
| | Dec | 1.0 | -0.3 | 162.3 |
| 2016 | Mar | 0.5 | 0.8 | 163.5 |
| | Jun | 0.6 | 0.8 | 164.9 |
| | Sep | 1.1 | -0.1 | 164.7 |
| | Dec | 1.6 | 0.1 | 164.8 |

Figure 2.1.1 RPI overview

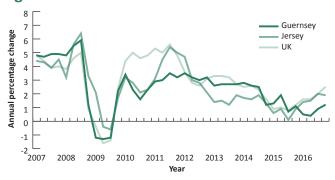


Table 2.1.2 RPI overview

| | | Annual % | Quarterly % | Index (1999 |
|------|-----|----------|-------------|-------------|
| | | change | change | base) |
| 2013 | Dec | 2.7 | 0.5 | 157.8 |
| 2014 | Mar | 2.8 | 1.2 | 159.6 |
| | Jun | 2.6 | 0.2 | 159.9 |
| | Sep | 2.5 | 0.6 | 160.9 |
| | Dec | 1.2 | -0.8 | 159.6 |
| 2015 | Mar | 1.3 | 1.3 | 161.7 |
| | Jun | 1.9 | 0.8 | 163.0 |
| | Sep | 0.7 | -0.6 | 162.0 |
| | Dec | 1.1 | -0.4 | 161.4 |
| 2016 | Mar | 0.5 | 0.7 | 162.5 |
| | Jun | 0.4 | 0.8 | 163.7 |
| | Sep | 0.9 | -0.2 | 163.4 |
| | Dec | 1.2 | -0.1 | 163.3 |

The annual change in the RPIX was 1.6% at the end of December 2016, 0.5 percentage points higher than the previous quarter and 0.6 percentage points higher than December 2015 (see **Table 2.1.1** and **Figure 1.2.1**).

The quarterly change in the RPIX was 0.1% during the three month period ending December 2016, 0.2 percentage points higher than during the previous quarter and 0.4 percentage points higher than during the same period in 2015. Quarterly changes in the RPIX are subject to seasonal variations in price level and are often higher in the first and third quarters of each year than in the second and fourth quarters.

The annual change in the UK RPIX was 2.7% at the end of December 2016 and for Jersey, 1.9%.

The annual change in the RPI was 1.2% in December 2016, which was 0.3 percentage points higher than the previous quarter and 0.1 percentage points higher than in December 2015 (see Figure 2.2.1 and Table 2.2.1).

The annual change in the UK RPI was 2.5% at the end of December 2016 and for Jersey, 1.9%.

The quarterly change in the RPI for the quarter ending in December 2016 was -0.1%, which is 0.3 percentage points higher than during the quarter ending in December 2015 and 0.1 percentage points higher than the previous quarter. Similar to the RPIX, quarterly changes in the RPI are subject to seasonal variation. However, the RPI can be dominated by trends in mortgage interest payments.

The differential between RPIX and RPI this quarter is mainly attributable to falling house prices impacting mortgage interest payments together with lower interest rates.

3.1 Group analysis - annual

Figure 3.1.1 shows the annual percentage change in each of the fourteen RPI and RPIX groups. **Figure 3.1.2** shows the number of percentage points contributed to the annual change in the indices by each group. Only the Housing group shows a different percentage change between the RPIX and RPI, as a result of the exclusion of the mortgage interest item in the calculation of the RPIX. However, due to differences in the weightings the contribution made by each group to the RPI and RPIX can differ.

In the year ending December 2016, ten of the groups increased and three decreased, with one remaining the same. The Fuel and light group saw the largest annual increase at 5.2%, contributing 0.2% to the overall RPIX change. The Clothing and footwear and the Food groups showed the largest decreases at -2.5%, contributing -0.1 and -0.3 percentage points respectively to the overall RPIX change.

Figure 3.1.1 Annual percentage change

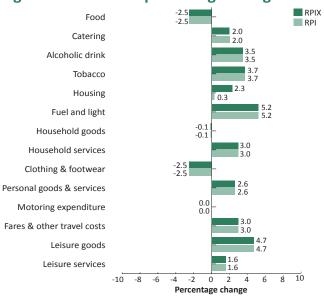
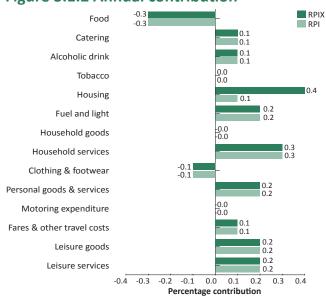


Figure 3.1.2 Annual contribution



NB: Due to the effects of rounding, any values of less than 0.05 will appear as 0.0

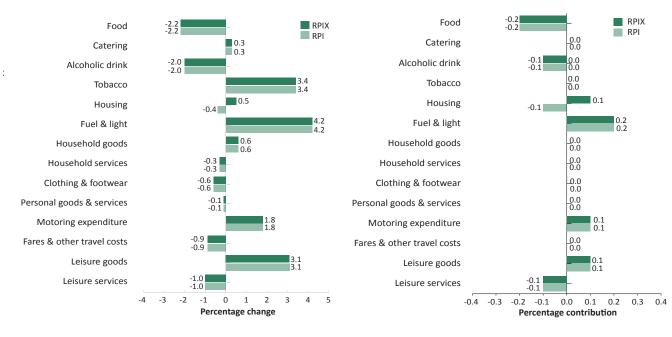
Table 3.1.1 Group weighting

| | Items included | | RPI |
|---|---|-----|-----|
| Food | Food and non-alcoholic drink bought for home consumption. | 12% | 11% |
| Catering | Food purchased in restaurants, at work, from takeaways, etc. | 4% | 4% |
| Alcoholic drink | Wine, beer, spirits and other alcoholic drinks. | 4% | 4% |
| Tobacco | Cigarettes, cigars and other tobacco products. | 1% | 1% |
| Housing | Housing Interest paid on mortgages (for RPI only), rents, parish rates and routine household maintenance and servicing costs. | | 22% |
| Fuel & light | Goods and services for the provision of light, heat and power in the home e.g. gas, oil and electricity. | | 5% |
| Household goods Non-food items for the household including house and garden furniture, carpets, curtains and bedding. | | 7% | 6% |
| Household services | Household services Services enlisted for the household such as contents insurance, domestic appliances, postal and telecoms. | | 10% |
| Clothing & footwear | Adults' and children's clothing and footwear. | 3% | 3% |
| Personal goods & services | Goods and services for personal use such as jewellery, cosmetics and toiletries plus medical expenses. | 8% | 7% |
| Motoring expenditure | Motoring expenditure Vehicle purchase, running and maintenance costs, including motor fuel. | | 8% |
| Fares & other travel costs | Fares & other travel costs Air and sea passenger fares and other travel related costs. | | 5% |
| Leisure goods | isure goods Goods for sports, hobbies and entertainment including electronic goods, sporting and gardening equipment. | | 4% |
| Leisure services | Services purchased for leisure activities including foreign holidays, cinema tickets and sporting activities. | 11% | 10% |

3.2 Group analysis - quarterly

Figure 3.2.1 Quarterly percentage change

Figure 3.2.2 Quarterly contribution



NB: Due to the effects of rounding, any values of less than 0.05 will appear as $0.0\,$

Seven of the fourteen RPIX (and six of the RPI) groups saw an average price increase in the three months ending in December 2016 (Figure 3.2.1).

The largest percentage increase (4.2%) came from the Fuel and light group, making a contribution of 0.2 percentage points to the quarterly changes in the RPI and the RPIX. (Figure 3.2.2). This was followed by the Tobacco group which, with an increase of 3.4%, contributing 0.0 percentage points to the overall quarterly change due to its low weighting within the index.

The largest percentage decrease (-2.2%) was seen in the Food group which made a contribution of -0.2 percentage points to the overall quarterly change.

The Housing group, which has the highest weighting in both indices, made a contribution of 0.1 percentage points to the quarterly change in the RPIX, having increased by 0.5%. The change in the RPI attributable to Housing was -0.4%, contributing -0.1 percentage points to the quarterly change.

Section 3.2 provides further details of the changes by group over the quarter.

3.2 Group analysis - quarterly

Within each group, specific items can be identified as having an upward or downward effect on the Index. Details are given below. The figures presented in brackets are the quarterly changes for each group.

Food (-2.2%)

Seasonal reductions in the price of lettuce, cucumber and some vegetables together with offers in crisps, cola, sweets and chocolate lead to an overall decrease, which was slightly offset by increases in strawberries and flour.

Catering (0.3%)

The positive change in this category is mainly attributable to small increases in the price of pub cold snacks and in restaurant main courses.

Alcoholic drink (-2.0%)

Reductions in the prices of sparkling white wine and in bottles of red and white wine and whisky were the main contributors to the overall decrease in this group.

Tobacco (3.4%)

There were increases in all types of tobacco, with the largest percentage increase in mentholated cigarettes.

Housing (0.5% RPIX, -0.4% RPI)

Increases in the prices of many DIY items, including paint brushes, wallpaper paste and paint, together with a small increase in unfurnished private rentals lead to an RPIX increase for this group. Reductions in the mortgage interest rate, combined with falling house prices meant that there was a reduction in RPI for this group.

Fuel and light (4.2%)

Higher kerosene (for domestic oil heating) prices contributed to the increase this quarter.

Household goods (0.6%)

Increases in the prices of living room furniture and towels were partly countered by price reductions in bedroom and dining room furniture and personal appliances (such as electric razors).

Household services (-0.3%)

Increases in domestic help charges and household services maintenance were more than offset by reductions in house conveyancing fees and estate agent fees.

Clothing and footwear (-0.6%)

Seasonal range price increases on items such as sandals and coats were countered by reductions in the prices of many boots, shoes, jumpers and cardigans.

Personal goods and services (-0.1%)

This change has been influenced by reductions in the cost of umbrellas, watches and tissues.

Motoring expenditure (1.8%)

The primary contributors to this increase were the increase in price of petrol and diesel, as well as some spare parts and accessories.

Fares and other travel goods (-0.9%)

Lower ferry and sea fares as well as reduced costs of air fares have lead to a decrease this quarter.

Leisure goods (3.1%)

Price rises on PC peripherals, such as printers and hard drives, PCs and lawnmowers contributed to the increase.

Leisure services (-1.0%)

The decrease in this category is largely attributable to seasonal reductions in hotel accommodation costs.

4.1 Cumulative changes, reflation factors and indices

Table 4.1.1 RPIX cumulative changes and reflation factors to 31st December 2016

| | Cumulative % change | Reflation factor |
|-----------|---------------------|------------------|
| 3 months | -0.1 | 1.00 |
| 6 months | 0.0 | 1.00 |
| 9 months | 0.8 | 1.01 |
| 12 months | 1.6 | 1.02 |
| 15 months | 1.2 | 1.01 |
| 18 months | 0.6 | 1.01 |
| 2 years | 2.6 | 1.03 |
| 3 years | 3.3 | 1.03 |
| 4 years | 5.4 | 1.05 |
| 5 years | 8.6 | 1.09 |
| 10 years | 28.4 | 1.28 |

Table 4.1.2 RPI cumulative changes and reflation factors to 31st December 2016

| | Cumulative % change | Reflation factor |
|-----------|---------------------|------------------|
| 3 months | -0.1 | 1.00 |
| 6 months | -0.3 | 1.00 |
| 9 months | 0.5 | 1.00 |
| 12 months | 1.2 | 1.01 |
| 15 months | 0.8 | 1.01 |
| 18 months | 0.2 | 1.00 |
| 2 years | 2.3 | 1.02 |
| 3 years | 3.5 | 1.03 |
| 4 years | 6.3 | 1.06 |
| 5 years | 9.7 | 1.10 |
| 10 years | 25.6 | 1.26 |

Table 4.1.3 RPIX and RPI index figures at 31st December 2016

| Year of base | RPIX index | RPI index |
|--------------|------------|-----------|
| 1949 | - | 3,563.9 |
| 1965 | - | 2,081.7 |
| 1974 | - | 1,148.2 |
| 1978 | - | 555.7 |
| 1983 | - | 350.0 |
| 1988 | - | 261.9 |
| 1994 | - | 193.8 |
| 1998 | 164.8 | - |
| 1999 | - | 163.3 |
| 2008 | 118.2 | 115.4 |
| 2014 | 101.7 | 101.5 |

Indices are used to calculate the change in prices over time. The headline annual inflation in RPIX or RPI is the percentage change in the index over a year. However, it is possible to calculate percentage changes over longer periods of time.

There is an **inflation calculator** on our website (**www.gov.gg/rpi**) which you can use to calculate the percentage change in the RPI between any two quarters from 1949 onwards. The inflation calculator can also calculate the reflated value of a monetary sum (e.g. a rental payment) over the specified period.

The effect of inflation is to erode the purchasing power of currency. The reflation factors in **Tables 4.1.1** and **4.1.2** can be used to inflate old values to approximate current prices.

To convert a price, multiply it by the appropriate reflation factor. For example, using RPIX reflation factors, £100 in December 2006 is equivalent to £100 x 1.28 = £128 in December 2016.

Reflation factors can also be used in the opposite way. To calculate what £100 in 2016 would have been worth in 2006, divide by the relevant reflation factor.

When making long-term comparisons, it should be taken into account that the 'shopping basket' may have changed over time, since households may not be spending money on the same products as they did in the past.

Following each Household Expenditure Survey the index is rebased (i.e. set to 100). **Table 4.1.3** shows the index value for the current quarter for each year of base, including the new index, revised to 100 in September 2014. Full time series of index figures for each base are available on our website (www.gov.gg/rpi).

5.12 UK and Jersey inflation rates

Table 5.1.1 Annual change in RPIX in Guernsey, the UK and Jersey

| | | Guernsey | UK | Jersey |
|------|-----|----------|-----|--------|
| 2011 | Dec | 2.8 | 5.0 | 5.1 |
| 2012 | Mar | 3.2 | 3.7 | 4.9 |
| | Jun | 3.1 | 2.8 | 3.2 |
| | Sep | 3.0 | 2.6 | 2.9 |
| | Dec | 3.0 | 3.0 | 2.2 |
| 2013 | Mar | 2.3 | 3.2 | 1.6 |
| | Jun | 2.1 | 3.3 | 1.6 |
| | Sep | 2.0 | 3.2 | 1.4 |
| | Dec | 2.1 | 2.8 | 2.1 |
| 2014 | Mar | 2.2 | 2.5 | 1.9 |
| | Jun | 2.1 | 2.7 | 1.8 |
| | Sep | 1.8 | 2.3 | 2.1 |
| | Dec | 0.6 | 1.7 | 1.5 |
| 2015 | Mar | 0.8 | 0.9 | 0.7 |
| | Jun | 1.5 | 1.1 | 1.0 |
| | Sep | 0.5 | 0.9 | 0.1 |
| | Dec | 1.0 | 1.3 | 1.0 |
| 2016 | Mar | 0.5 | 1.6 | 1.5 |
| | Jun | 0.6 | 1.7 | 1.5 |
| | Sep | 1.1 | 2.2 | 2.0 |
| | Dec | 1.6 | 2.7 | 1.9 |

Table 5.1.2 Annual change in RPI in Guernsey, the UK and Jersey

| | | Guernsey | UK | Jersey |
|------|-----|----------|-----|--------|
| 2011 | Dec | 3.2 | 4.8 | 5.0 |
| 2012 | Mar | 3.5 | 3.6 | 4.7 |
| 2012 | Jun | 3.2 | 2.8 | 3.0 |
| | | | | |
| | Sep | 3.0 | 2.6 | 2.8 |
| | Dec | 3.2 | 3.1 | 2.1 |
| 2013 | Mar | 2.6 | 3.3 | 1.4 |
| | Jun | 2.7 | 3.3 | 1.5 |
| | Sep | 2.7 | 3.2 | 1.2 |
| | Dec | 2.7 | 2.7 | 1.9 |
| 2014 | Mar | 2.8 | 2.5 | 1.7 |
| | Jun | 2.6 | 2.6 | 1.6 |
| | Sep | 2.5 | 2.3 | 1.9 |
| | Dec | 1.2 | 1.6 | 1.3 |
| 2015 | Mar | 1.3 | 0.9 | 0.6 |
| | Jun | 1.9 | 1.0 | 0.9 |
| | Sep | 0.7 | 0.8 | 0.1 |
| | Dec | 1.1 | 1.2 | 0.9 |
| 2016 | Mar | 0.5 | 1.6 | 1.4 |
| | Jun | 0.4 | 1.6 | 1.5 |
| | Sep | 0.9 | 2.0 | 2.0 |
| | Dec | 1.2 | 2.5 | 1.9 |

Table 5.1.1 and **Table 5.1.2** show the comparable RPIX and RPI inflation rates reported by the UK Office of National Statistics¹ and the States of Jersey Statistics Unit². There may be differences in the methodology used to calculate inflation and care should be taken when comparing figures from different jurisdictions.

Typically inflation in the three jurisdictions follows broadly the same trends. However, it should be noted that changes in taxation and other circumstances specific to a particular jurisdiction may have a significant impact on inflation. For example, the introduction of the Goods and Services Tax in Jersey in 2008 exerted an upwards pressure on both RPIX and RPI which was not experienced in either Guernsey or the UK. Similarly the temporary reduction of the UK VAT rate to 15% in 2009, its return to 17.5% in 2010, and the subsequent increase to 20% in 2011, will have influenced inflation in the UK but had little impact in Guernsey and Jersey.

The higher cost of housing experienced in Guernsey and Jersey compared with the UK, and the resultant higher weighting of housing in the inflation rates of the islands, means that changes in the cost of housing typically exert more inflationary pressure in Guernsey and Jersey than in the UK. Differences in spending patterns in other areas, such as travel and motoring, will also affect the relative effect of price changes on the indices.

¹ www.statistics.gov.uk 2 www.gov.je/statistics

6.1 Methodology

The calculations of the RPIX and RPI are based on the price change of items within a 'shopping basket'. Whilst a single household's shopping basket may contain anywhere in the region of one to several hundred items, the 'basket' of goods and services used in the calculation contains over 1,700 items. This list of goods and services remains consistent every quarter in order to measure price changes over time.

Every household in the island spends its income in different ways so it is impractical to monitor changes in the price of every single item on sale. Therefore, the Indices contain a representation of what 'typical' consumers in a Guernsey household spend their money on. They should not be confused with a 'cost of living' index, which will vary according to individual expenditure.

The methodology is continuously monitored and is periodically audited and updated to ensure it remains accurate and representative. The results of the latest review were first incorporated in the December 2014 inflation results. The Guide to the Guernsey Inflation Indices, which is available online at www.gov.gg/rpi, provides more detail on the recent changes along with information regarding the methodology, calculation and uses of the inflation indices.

The main source of information for the periodic review is the Household Expenditure Survey. The results of the 2012-13 Survey are now available from **www.gov.gg/hes**. The next Survey is due to commence in the third quarter of 2017 and planning for this is underway.

6.2 Contact details

For more information on how the RPIX and RPI are calculated please see the Guide to the Guernsey Retail Prices Index, which, along with the Inflation Calculator, is available via www.gov.gg/rpi.

The next inflation bulletin (for March 2017) will be published at 9:30am on Friday 21st April 2017.

You may also be interested in other publications from States of Guernsey Data and Analysis Services, which are all available online at www.gov.gg/data. Please contact us for further information.

E-mail: dataandanalysis@gov.gg

Telephone: (01481) 717292

Write / visit: Data and Analysis

Sir Charles Frossard House

La Charroterie St Peter Port Guernsey GY1 1FH



For more information go to gov.gg/data