

Introduction

The Guernsey Retail Prices Index (GRPI) is the measure of inflation used in Guernsey. It measures the change in the prices of goods and services bought for the purpose of consumption or use by households in Guernsey. It is published quarterly by the States of Guernsey Policy and Research Unit. The calculation of the GRPI is based on the price change of items within a 'shopping basket'. Whilst some prices rise over time, others will fall or fluctuate and the Index represents the average change in these prices. More detailed information on the RPI and its calculation can be found at the end of this handout.

Headlines

- At the end of March 2008 Guernsey's annual headline rate of inflation was **4.8%**. This is 0.1 percentage points lower than the figure at the end of December 2007. The equivalent figures for the UK and Jersey were 3.8% and 3.2% respectively.
- Guernsey's RPIX (inflation excluding mortgage interest payments) was 0.4 percentage points higher this quarter at **4.3%**.
- The **Housing** group, which has the largest weight within the Index, contributed **1.2%** of the overall increase, which is seven percentage points less than last quarter.
- The Index increased to **139.1** (1999 base).

Overview

The Guernsey RPI increased by 4.8% for the twelve months ending 31st March 2008. This is the same rate of inflation as in March 2007. The increase over the three months ending 31st March 2008 was 2.1%, compared to 1.1% during the previous quarter.

The Housing group continued to be the largest contributor to the annual percentage change (1.2% out of 4.8%). However, there was no increase over the last quarter, which was mainly due to the Bank of England reducing the interest rate, reducing the cost of mortgage repayments. This combined with decreases in costs of bathrooms and kitchens to offset increases in other areas of the Housing group.

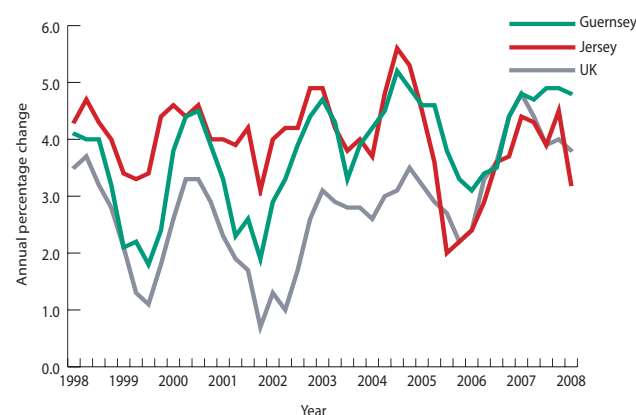
The Food Away From Home group provided the greatest contribution (0.4%) to the quarterly increase (2.0%). In addition, the Alcohol, Fuel Light and Power, Household Goods, Motoring and Fares groups each contributed 0.3% to inflation this quarter.

The only Group to have a deflationary effect on the index during the quarter, was Clothing & Footwear (-0.4%).

Table 1: Annual Rates of Inflation

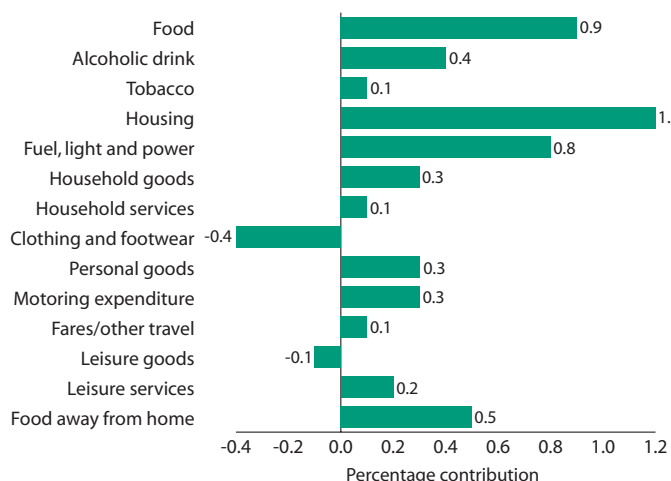
Year	March	June	September	December
2002	2.9	3.3	3.9	4.4
2003	4.7	4.3	3.3	3.9
2004	4.2	4.5	5.2	4.9
2005	4.6	4.6	3.8	3.3
2006	3.1	3.4	3.5	4.4
2007	4.8	4.7	4.9	4.9
2008	4.8			

Figure 1: Annual Rates of Inflation



RPI Analysis

Figure 2: Annual Contribution to RPI



Main contributions to the annual change

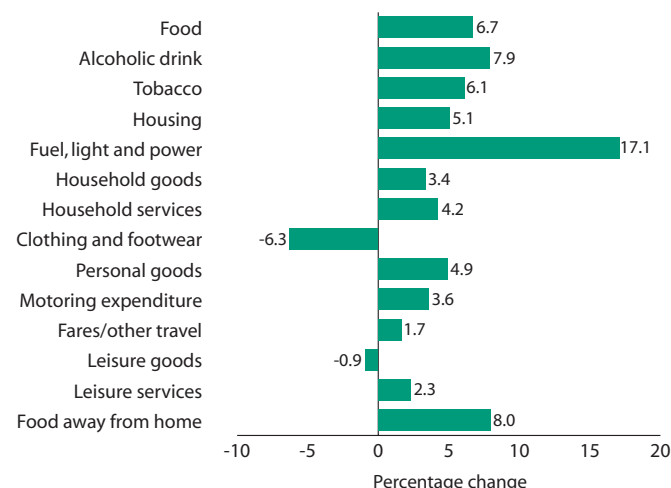
The contribution of each of the RPI groups to the overall annual rate are shown in *Figure 2*.

The Housing group increased by 5.1% (Figure 3), which, combined with its high weighting, means it remained the largest contributor (1.2% out of 4.8%) to the annual increase.

The Fuel, Light & Power group, increased by 17.1% since March 2007 - the largest percentage increase of all the groups during the last 12 months. However, with a relatively low weight it had a lesser effect (0.8%) on the overall RPI.

The Food group increased 6.7% over the year and since it has the second highest weight in the RPI it contributed 0.9% to the overall annual RPI rate.

Figure 3: Annual Percentage Change



Main contributions to the quarterly change

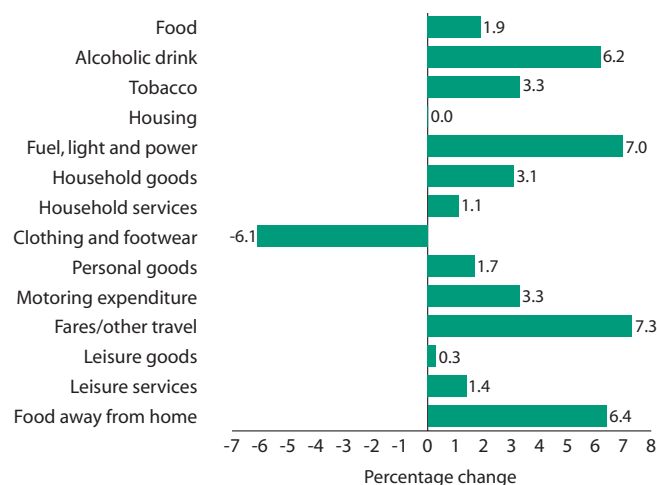
Figure 4 shows the percentage change over the three months ending March 31st 2008 for each of the RPI groups. Their contribution to the **total quarterly increase (2.0%)** is detailed on *Page 3* of this handout.

Twelve of the fourteen groups had an upward effect on the index this quarter (see *Figure 4*). The only decrease was seen in Clothing & Footwear (a 6.1% decrease, contributing, -0.4% to the quarterly change).

Fares / Other Travel increased the most this quarter (7.3%), but has a relatively low weighting, so contributed 0.3% to the quarterly increase.

Significant increases were also seen in the Fuel, Light and Power, Food Away from Home and Alcoholic Drinks groups. Of these, the Food away from Home group has the highest weighting and as a result, contributed 0.4% to the quarterly increase.

Figure 4: Quarterly Percentage Change



Note: Individual contributions to the change in rates may not sum to the total due to rounding.

RPI Group Analysis

Within each group, specific items can be identified as having an upward or downward effect on the Index according to their price increase or decrease during the quarter. The most salient of which are identified below.

Food (1.9%)

The price of cereals and potatoes and their products, most meats and tinned products increased this quarter. These increases have also been noted in the UK and have been attributed to increasing freight costs, poor harvests and increasing demand from developing economies for products such as meat.

Alcohol (6.2%)

The duty on alcoholic drinks was increased on 1st January 2008 and as a result, the prices of all the items within this group increased during the quarter.

Tobacco (3.3%)

The duty on tobacco was also increased on 1st January 2008 and prices of cigarettes (highly weighted) increased slightly this quarter.

Housing Group (0.0%)

The 0.25% decrease in the official Bank of England interest rate this quarter reduced the cost of borrowing, which had a deflationary effect on the cost of home ownership for Islanders with a mortgage, even though house prices (measured using a seven year moving average) continued to rise. This item has the highest weight within the group, so the decrease in this item, combined with decreases in the cost of bathrooms and kitchens, offset increases in water rates, sewage emptying and some building trades' labour rates.

Fuel, Light and Power (7.0%)

Prices of heating oil and gas increased again this quarter, primarily due to rising oil prices on the World Markets. Other prices remained stable.

Household Goods (3.1%)

There were decreases in the prices of household appliances this quarter, but these were offset by increases in pet expenses (e.g. veterinary expenses) and floor coverings.

Household Services (1.1%)

Most prices remained stable this quarter. The cost of domestic services (e.g. child minders, window cleaners, gardeners), which are the items with the highest weights in this group, increased slightly.

Clothing and Footwear (-6.1%)

The prices of most items within this group decreased this quarter, including shirts, coats and jeans.

Personal Goods (1.7%)

There were increases in the cost of doctors fees, prescriptions and medical insurance this quarter.

Motoring (3.3%)

Motor tax was replaced by increased fuel duty this quarter. As a result of this and increases in oil prices on World Markets, fuel prices increased significantly. The combination of removing motor tax and rising fuel prices contributed 0.2% to the quarterly increase. There were also increases in the cost of repairs and servicing and driving licenses.

Fares & Other Travel (7.3%)

The costs of air and sea travel fluctuate each quarter; this quarter there were increases in the costs of most sea and air travel (also noted in the UK) along with an increase in taxi fares.

Leisure Goods (0.3%)

Increases in the price of some newspapers and photographic goods were combined with decreases in prices of CDs and mobile phones.

Leisure Services (1.4%)

The prices in this group remained stable this quarter, with increases only in the prices of private tuition.

Food Away from Home (6.4%)

There were increases in the price of meals in restaurants this quarter.

RPI Indices and Reflation Factors

Table 2: RPI Indices

	March	June	September	December
2000	101.2	102.7	103.3	103.9
2001	104.5	105.2	106.0	105.8
2002	107.5	108.6	110.1	110.5
2003	112.6	113.3	113.8	114.8
2004	117.4	118.4	119.7	120.5
2005	122.8	123.9	124.2	124.5
2006	126.6	128.1	128.6	130.0
2007	132.7	134.1	134.9	136.4
2008	139.1			

Table 3: Percentage Change at March 2008

Period	Percentage change
3 months	2.0
6 month	3.1
9 months	3.7
12 months	4.8
18 month	8.2
2 years	9.9
3 years	13.3
4 years	18.5
5 years	23.5
10 years	45.8

Table 4: Index Figures at March 2008

Year of rebase (Index = 100)	Index Figures
1999	139.1
1994	165.1
1988	223.1
1983	298.1
1978	473.4

Table 5: Reflation Factors for December 2007

Year	Reflation Factor
1998	1.46
1999	1.40
2000	1.38
2001	1.32
2002	1.29
2003	1.24
2004	1.14
2005	1.10
2006	1.05
2007	1.00

Note: The percentage change figures given in Table 3 are calculated using unrounded index figures, so may differ slightly to those calculated using the index figures given in Table 2.

RPI Indices

RPI Indices are used to calculate change in prices over time. By determining the percentage change in the index over one year, the annual RPI headline figure is calculated. The annual Index rose by 4.8% to 139.1 on 31st March 2008 (*Table 2*).

To calculate the percentage change in value between two dates, use the following formula:

$$\% \text{ Change} = \frac{(\text{Most Recent Value} - \text{Earlier Value}) \times 100}{\text{Earlier Value}}$$

For ease of calculation, selected percentage increases for the most recent quarter are given in *Table 3*.

It is possible to calculate percentage changes over longer periods of time. However, it should be taken into account when making long-term comparisons that the 'shopping basket' may have changed over time and households may not be spending money on the same products as they did in the past.

The RPI Index is rebased (i.e. set at 100) approximately every five years, which normally coincides with the introduction of new weights from the Guernsey Household Expenditure Survey (HES). The Indices as they stand at the end of March 2008 for the 1994, 1988, 1983 and 1978 bases along with the current base are shown in *Table 4*.

The RPI will be rebased later this year following the completion of the latest HES, the results of which are available from our website www.gov.gg/pru. The new weights will be applied, along with updates to the shopping basket, to ensure that the RPI remains representative.

Reflation Factors

The effect of inflation is to erode the purchasing power of currency. The reflation factors in *Table 5* are based on the fourth quarter figures and can be used to convert old values to approximate current prices. For example, £1 would buy more in 1998 than it would in 2008.

To convert a price, multiply it by the appropriate year's value. For example, £100 in 1998 is equivalent to £100 x 1.46 = £146 in 2008.

Reflation factors can also be used in the opposite way. To calculate what £100 in 2008 would have been worth in 1998 divide by the relevant reflation factor.

There is an *inflation calculator* on our website, which you can use to perform reflation calculations for any period from 1965 onwards.

RPI Group Indices

Table 6: Group Indices

RPI Group	Weight	2007 Mar	2007 Jun	2007 Sept	2007 Dec	2008 Mar	Annual % change	Quarterly % change
Food	127	125.4	127.9	126.8	131.3	133.8	6.7	1.9
Alcoholic Drink	52	167.3	167.2	169.1	170.0	180.4	7.9	6.2
Tobacco	19	274.4	278.6	271.5	281.8	291.0	6.1	3.3
Housing	216	202.6	206.5	211.3	213.0	212.9	5.1	0.0
Fuel, Light and Power	41	164.5	172.6	174.5	180.1	192.7	17.1	7.0
Household Goods	79	129.1	126.8	129.8	129.6	133.6	3.4	3.1
Household Services	33	153.3	156.4	157.1	158.0	159.7	4.2	1.1
Clothing & Footwear	56	98.7	97.1	97.8	98.5	92.5	-6.3	-6.1
Personal Goods	49	158.0	162.4	161.2	163.0	165.8	4.9	1.7
Motoring Expenditure	85	144.5	142.8	142.4	144.9	149.7	3.6	3.3
Fares/Other Travel	33	187.2	184.5	183.7	177.4	190.4	1.7	7.3
Leisure Goods	63	104.5	105.1	103.4	103.3	103.5	-0.9	0.3
Leisure Services	92	164.8	165.0	165.8	166.2	168.6	2.3	1.4
Food Away from Home	55	151.3	159.1	154.0	153.6	163.4	8.0	6.4

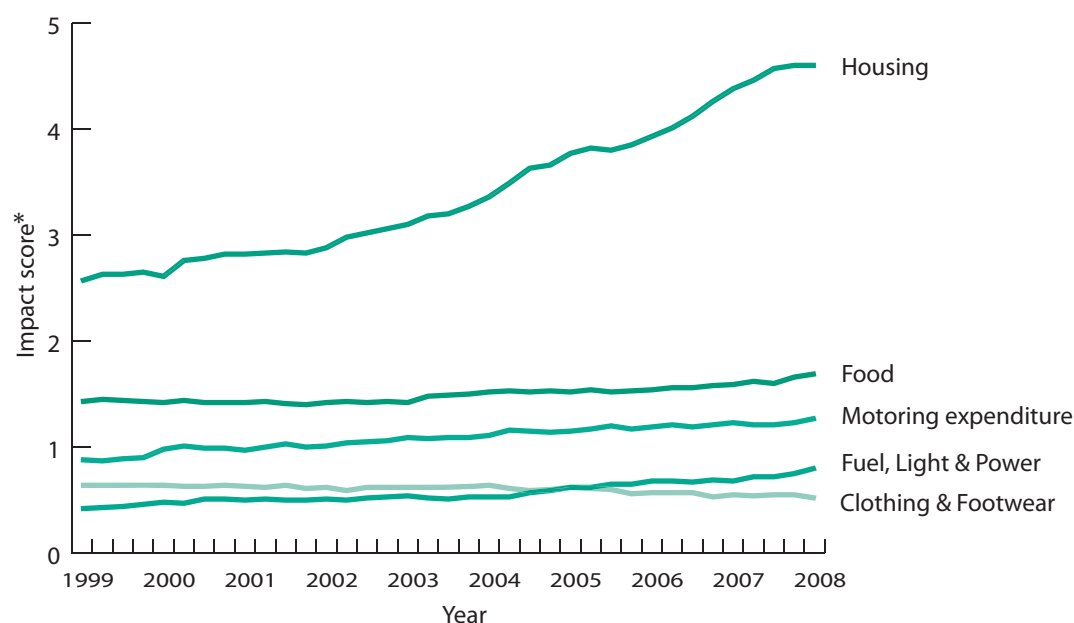
Individual group indices are presented for March 2007 to March 2008 in *Table 6* along with their corresponding annual and quarterly percentage change (the same group percentage changes are illustrated in *Figures 3 & 4* on Page 2)

It is possible to use the group indices to track the impact of each group on the RPI over time. This is done by multiplying the index value by the group weight. The results of the main contributors are presented graphically in *Figure 5*.

This quarter, the Fuel, Light & Power group showed the fastest rate of increase (shown by a steeper slope on the graph) this quarter.

For the first time since 2005, the Housing group did not increase during the quarter. The change in this trend is due to the combined effect of a 0.25% decrease in the Bank of England interest rate and decreases in prices of bathrooms and kitchens.

Figure 5: Impact of RPI Group Indices



*Impact score is calculated by multiplying the group index figure by its weight and dividing by 10,000

Comparison with Other Jurisdictions

Table 7: Headline RPI - Guernsey, Jersey, UK

		Guernsey		UK		Jersey	
		Headline RPI	Quarterly Change	Headline RPI	Quarterly Change	Headline RPI	Quarterly Change
2001	Mar	3.3	0.6	2.3	0.0	4.0	1.4
	June	2.3	0.8	1.9	1.3	3.9	0.9
	Sept	2.6	0.8	1.7	0.1	4.2	1.3
	Dec	1.9	-0.1	0.7	-0.7	3.1	-0.6
2002	Mar	2.9	1.6	1.3	0.6	4.0	2.3
	June	3.3	1.0	1.0	1.0	4.2	1.1
	Sept	3.9	1.4	1.7	0.8	4.2	1.3
	Dec	4.4	0.4	2.9	0.5	4.9	0.1
2003	Mar	4.7	1.9	3.1	0.8	4.9	2.4
	June	4.3	0.6	2.9	0.8	4.2	0.4
	Sept	3.3	0.4	2.8	0.7	3.8	0.9
	Dec	3.9	1.0	2.8	0.5	4.0	0.3
2004	Mar	4.2	2.2	2.6	0.6	3.7	2.1
	June	4.5	0.9	3.0	1.2	4.8	1.5
	Sept	5.2	1.1	3.1	0.8	5.6	1.7
	Dec	4.9	0.7	3.5	1.0	5.3	0.0
2005	Mar	4.6	1.9	3.2	0.2	4.5	1.3
	June	4.6	0.9	2.9	0.9	3.6	0.6
	Sept	3.8	0.3	2.7	0.6	2.0	0.1
	Dec	3.3	0.2	2.2	0.5	2.2	0.2
2006	Mar	3.1	1.7	2.4	0.4	2.4	1.5
	June	3.4	1.2	3.3	1.8	2.9	1.1
	Sept	3.5	0.4	3.6	0.9	3.6	0.8
	Dec	4.4	1.1	4.4	1.3	3.7	0.3
2007	Mar	4.8	2.1	4.8	0.8	4.4	2.2
	June	4.7	1.1	4.4	1.4	4.3	1.0
	Sept	4.9	0.6	3.9	0.4	3.9	0.4
	Dec	4.9	1.1	4.0	1.4	4.5	0.9
2008	Mar	4.8	2.0	3.8	0.6	3.2	0.9

RPI was 3.2% in Jersey and 3.8% in the UK, compared to 4.8% in Guernsey.

The ten year trends as illustrated in *Figure 6* reveal a broadly similar cyclical trend for the three jurisdictions. The March RPI increase figure tends to be the highest of each year. The Guernsey rate of inflation was the highest this quarter (4.8%).

In Jersey, the Fuel & Light and Food groups showed the greatest annual increases, each contributing 0.9% to the 3.2% increase. The Household and Leisure Goods and Clothing & Footwear groups had downward effects on the annual increase.

In the UK, prices of heating oil and gas, transport costs made the largest upward contributions to the annual increase. Mortgage interest payments, furniture and household equipment and maintenance had downward effects.

It should be noted that there are methodological differences between the three jurisdictions* but the figures are broadly comparable.

*More information can be found on the following websites:

UK RPI: www.statistics.gov.uk

Jersey RPI: www.gov.je/ChiefMinister/Statistics

Figure 6: Headline RPI - Guernsey, Jersey and UK



RPIX

RPIX is RPI excluding the mortgage interest component. The mortgage interest component is calculated as a combination of increases/decreases in interest rates combined with the effects of rising/falling house prices.

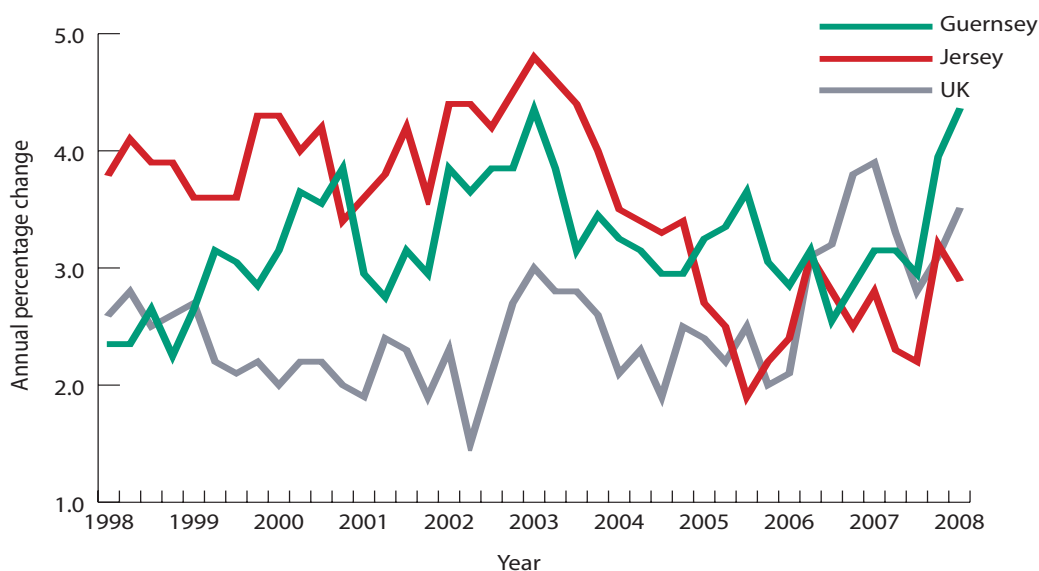
The Guernsey RPIX was 4.3%, compared to 3.9% last quarter. So, although the headline RPI is lower than last quarter, the RPIX is the highest it has been since 2003. This implies that although the mortgage interest component of the RPI decreased this quarter, core inflationary pressures (as shown on page 3) continued to increase.

Guernsey's RPIX remains higher than that of the UK (3.5%) and Jersey (2.9%) this quarter. This indicates that core inflationary pressures were greater in Guernsey this quarter than in the UK or Jersey.

Table 8: RPIX - Guernsey, Jersey and UK

		Guernsey	UK	Jersey
2001	Mar	2.9	1.9	3.6
	June	2.7	2.4	3.8
	Sept	3.1	2.3	4.2
	Dec	2.9	1.9	3.6
2002	Mar	3.8	2.3	4.4
	June	3.6	1.5	4.4
	Sept	3.8	2.1	4.2
	Dec	3.8	2.7	4.5
2003	Mar	4.3	3.0	4.8
	June	3.8	2.8	4.6
	Sept	3.1	2.8	4.4
	Dec	3.4	2.6	4.0
2004	Mar	3.2	2.1	3.5
	June	3.1	2.3	3.4
	Sept	2.9	1.9	3.3
	Dec	2.9	2.5	3.4
2005	Mar	3.2	2.4	2.7
	June	3.3	2.2	2.5
	Sept	3.6	2.5	1.9
	Dec	3.0	2.0	2.2
2006	Mar	2.8	2.1	2.4
	June	3.1	3.1	3.1
	Sept	2.5	3.2	2.8
	Dec	2.8	3.8	2.5
2007	Mar	3.1	3.9	2.8
	June	3.1	3.3	2.3
	Sept	2.9	2.8	2.2
	Dec	3.9	3.1	3.2
2008	Mar	4.3	3.5	2.9

Figure 7: RPIX - Guernsey, Jersey and UK



Methodology

How is the RPI calculated?

The calculation of the GRPI is 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 of the GRPI contains over 2,000 items. This list of goods and services remains the same 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 Index contains a representation of what 'typical' consumers in a Guernsey household spend their money on. It should not be confused with a 'cost of living' index, which will vary according to individual expenditure.

Which items are included?

All goods and services on which a household typically spends money make up the GRPI. The shopping basket stretches from the inexpensive, such as the cost of a loaf of bread to expensive items such as the cost of new car.

Prices are collected quarterly from over 250 local suppliers, businesses and internet shopping sites and in order to maintain consistency, they are collected from the same establishment each quarter.

Are all items equally represented?

The average person spends more of their budget on some items and less on others. Therefore the GRPI is weighted, which means that some items have a higher importance or 'weight' than others. An increase in certain items will have more of an impact on the GRPI than others, for example, an increase in the price of petrol will have more effect on the Index than an increase in the price of milk.

How is it kept up to date?

The shopping basket is updated by means of a Household Expenditure Survey (HES), which takes place approximately every five to six years. The main purpose of the HES is to establish the proportion of expenditure spent on particular items in an average household budget. The 'shopping basket' is then revised according to the results of the survey. A new HES was undertaken in 2005/6 and the revised set of items and weights are expected to be introduced in 2007.

What is RPIX?

RPIX is simply RPI excluding mortgage interest payments. It is sometimes referred to as the "underlying" rate of inflation. Some jurisdictions use RPIX to set inflation targets as it does not reflect the direct impact of interest rate changes made to control inflation.

Further Information

Please contact Helen Walton (Research & Information Analyst) for further information.

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