

## 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 June 2008 Guernsey's annual headline rate of inflation was **5.5%**, compared to 4.8% at the end of March. The equivalent figures for the UK and Jersey were 4.6% and 5.6% respectively.
- The **Housing** group, which has the largest weight within the Index, contributed **1.1%** of the headline increase. There were also large increases in the Food, Fuel, Light & Power, Motoring and Alcoholic Drinks groups.
- Guernsey's RPIX (inflation excluding mortgage interest payments) was **5.4%** this quarter, compared to 4.3% at the end of March.
- The Index increased to **141.5** (1999 base).

## Overview

The Guernsey RPI increased by 5.5% for the twelve months ending 30th June 2008. This is the highest rate of inflation since December 1991. The increase over the three months ending 30th June 2008 was 1.7%, compared to 2.1% during the previous quarter.

The Housing group continued to be the largest contributor to the annual percentage change (1.1% out of 5.5%). It was also the largest contributor to the quarterly increase (0.4% out of 1.7%), followed by the Food and Motoring Groups, which each contributed 0.3% to the quarterly change.

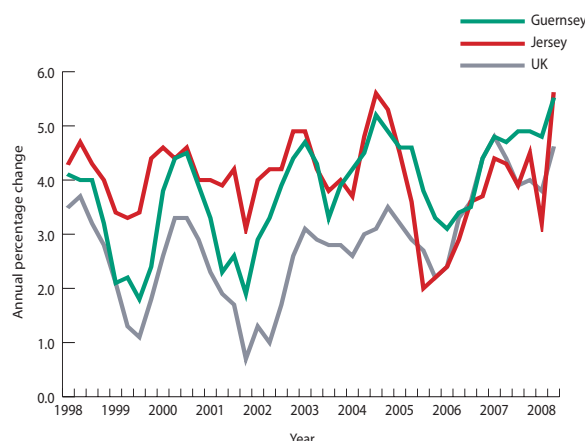
In the Housing group, there were decreases during the quarter due to the Bank of England reducing the interest rate again, which brought down the cost of mortgage repayments. However, these were offset by increases in costs of home improvements and rents.

Clothing & Footwear and Leisure Goods had a downward effect on the annual change (-0.4% in total).

Table 1: Annual Rates of Inflation

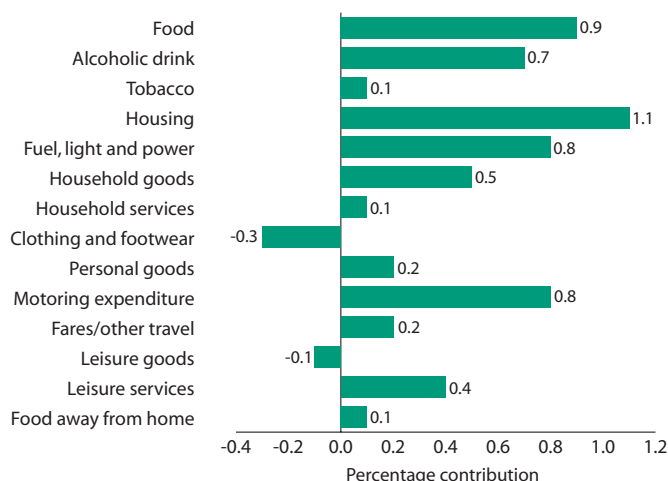
Year	March	June	September	December
2002	2.9	3.3	3.9	4.4
2003	4.7	4.3	3.3	3.9
2004	4.2	4.5	5.2	4.9
2005	4.6	4.6	3.8	3.3
2006	3.1	3.4	3.5	4.4
2007	4.8	4.7	4.9	4.9
2008	4.8	5.5		

Figure 1: Annual Rates of Inflation

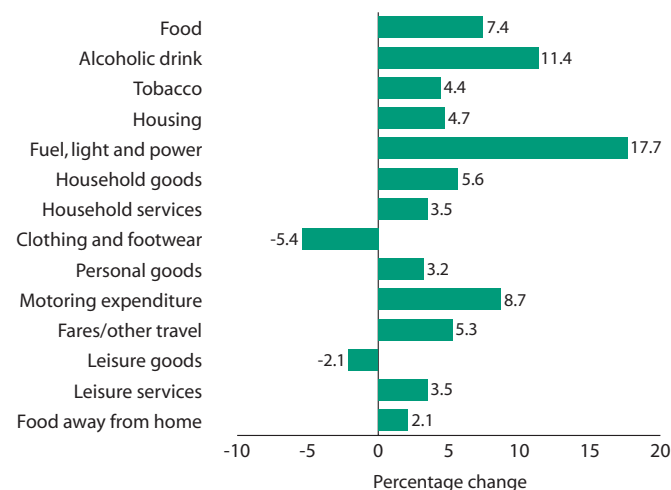


# RPI Analysis

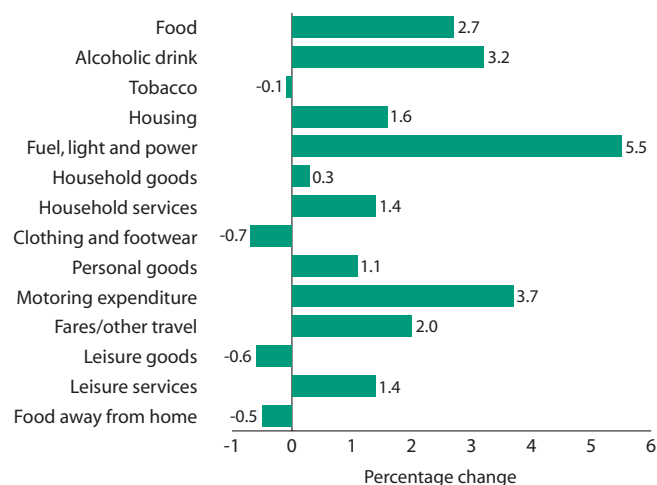
**Figure 2: Annual Contribution to RPI**



**Figure 3: Annual Percentage Change**



**Figure 4: Quarterly Percentage Change**



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

## Main contributions to the annual change

The contribution of each of the RPI groups to the overall annual rate are shown in *Figure 2* and the annual and quarterly percentage changes of the each groups are shown in *Figure 2* and *Figure 3* respectively.

The Housing group increased by 4.7% (*Figure 3*), which, combined with its high weighting, means that it remained the largest contributor (1.1% out of 5.5%) to the annual increase.

The Fuel, Light & Power group has increased by 17.7% since June 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.

Motoring also contributed 0.8% to the overall RPI as a result of its relatively high weight combined with a percentage increase of 8.7%.

Similarly, the Food group increased by 7.4% and since it has the second highest weight in the RPI it contributed 0.9% to the overall annual RPI rate.

The Alcoholic Drink group increased by 11.4%, but has a lower weighting, so contributed 0.7%.

## Main contributions to the quarterly change

*Figure 4* shows the percentage change over the three months ending June 30th 2008 for each of the RPI groups. Their contribution to the **total quarterly increase (1.7%)** is detailed on *Page 3* of this handout.

Ten of the fourteen groups had an upward effect on the Index this quarter (see *Figure 4*). Decreases were seen in the Clothing & Footwear, Leisure Goods, Food Away From home and Tobacco groups.

Fuel, Light & Power increased the most this quarter (5.5%), but has a relatively low weighting, so contributed 0.2% to the quarterly increase.

Significant increases were also seen in the Motoring, Food and Alcoholic Drinks groups. Of these, the Food and Motoring groups have the highest weights and as a result, contributed 0.3% each to the quarterly increase.

The Housing group has the highest weight, so the 1.6%

# RPI Group Analysis

increase in this group contributed 0.4% to the overall quarterly change.

Within each group, specific items can be identified as having an upward or downward effect on the Index, details are given below.

## **Food (2.7%)**

The price of the majority of items in this group increased this quarter. These increases have also been noted in the UK and have been attributed to increasing freight costs and increasing demands for land to cultivate crops for biofuels.

## **Alcoholic Drinks (3.2%)**

The prices of all the items within this group increased during the quarter.

## **Tobacco (-0.1%)**

The price of cigars decreased slightly this quarter.

## **Housing (1.6%)**

Another 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. Insurance prices also decreased, however, rents, home improvement costs and occupiers rates increased during the quarter, resulting in an overall increase.

## **Fuel, Light and Power (5.5%)**

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

## **Household Goods (0.3%)**

There were increases in the prices of pet food, stationary and furniture this quarter, which were partially offset by decreases in cleaning materials.

## **Household Services (1.4%)**

Postage expenses and bank charges increased this quarter, however insurance costs decreased. The prices of other items in the group remained stable.

## **Clothing and Footwear (-0.7%)**

The prices of men's suits and children's clothes decreased this quarter. There were increases in prices of some women's clothes, however most items remained stable.

## **Personal Goods (1.1%)**

There were increases in the cost of medical insurance, cosmetics, jewellery and spectacles this quarter.

## **Motoring (3.7%)**

As a result of increases in oil prices on World Markets, motor fuel prices increased again this quarter. There were also increases in the cost of vehicle parts, repairs and servicing.

## **Fares & Other Travel (2.0%)**

The costs of air and sea travel fluctuate each quarter; this quarter there were increases in the cost of most air and sea travel along with increases in vehicle hire prices.

## **Leisure Goods (-0.6%)**

Increases in the price of some newspapers, books and magazines were combined with decreases in prices of CDs, mobile phones and home computers.

## **Leisure Services (1.4%)**

Prices of holidays, TV licences and sport club memberships increased this quarter.

## **Food Away from Home (-0.5%)**

There were decreases in the prices of meals in restaurants this quarter. These were partially offset by increases in the prices of snacks, but resulted in a decrease overall.

# 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	141.5		

**Table 3: Percentage Change at June 2008**

Period	Percentage change
3 months	1.7
6 month	3.8
9 months	4.8
12 months	5.5
18 month	8.9
2 years	10.5
3 years	14.2
4 years	19.5
5 years	24.9
10 years	47.0

**Table 4: Index Figures at June 2008**

Year of rebase (Index = 100)	Index Figures
1999	141.5
1994	168.0
1988	227.0
1983	303.3
1978	481.6

**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 the change in prices over time. By determining the percentage change in the Index over one year, the annual RPI headline figure can be calculated. The annual Index rose by 5.5% to 139.1 on 30th June 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, when making long-term comparisons, it should be taken into account that the 'shopping basket' may have changed over time. In addition 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 stood at the end of June 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](http://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 ([www.gov.gg/pru](http://www.gov.gg/pru)), which you can use to perform reflation calculations for any period from 1965 onwards.

# RPI Group Indices

**Table 6: Group Indices**

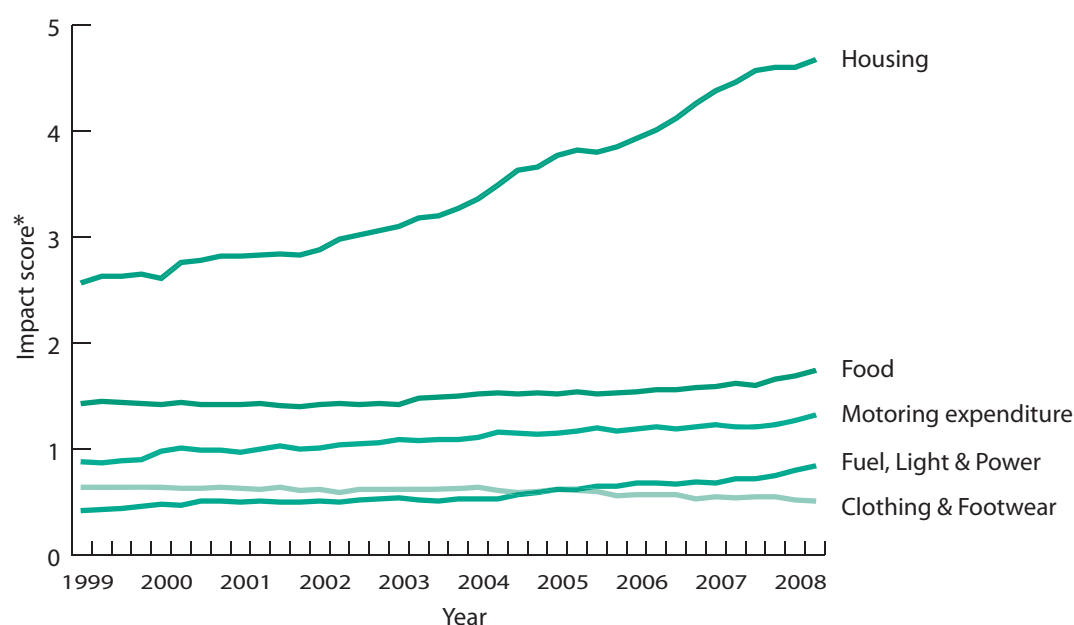
RPI Group	Weight	2007 Jun	2007 Sept	2007 Dec	2008 Mar	2008 Jun	Annual % change	Quarterly % change
Food	127	127.9	126.8	131.3	133.8	137.4	7.4	2.7
Alcoholic Drink	52	167.2	169.1	170.0	180.4	186.3	11.4	3.2
Tobacco	19	278.6	271.5	281.8	291.0	290.9	4.4	-0.1
Housing	216	206.5	211.3	213.0	212.9	216.3	4.7	1.6
Fuel, Light and Power	41	172.6	174.5	180.1	192.7	203.2	17.7	5.5
Household Goods	79	126.8	129.8	129.6	133.6	133.9	5.6	0.3
Household Services	33	156.4	157.1	158.0	159.7	161.9	3.5	1.4
Clothing & Footwear	56	97.1	97.8	98.5	92.5	91.8	-5.4	-0.7
Personal Goods	49	162.4	161.2	163.0	165.8	167.6	3.2	1.1
Motoring Expenditure	85	142.8	142.4	144.9	149.7	155.3	8.7	3.7
Fares/Other Travel	33	184.5	183.7	177.4	190.4	194.2	5.3	2.0
Leisure Goods	63	105.1	103.4	103.3	103.5	102.9	-2.1	-0.6
Leisure Services	92	165.0	165.8	166.2	168.6	170.9	3.5	1.4
Food Away from Home	55	159.1	154.0	153.6	163.4	162.5	2.1	-0.5

Individual group indices are presented for June 2007 to June 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 and Motoring groups showed the fastest rates of increase (shown by a steeper slope on the graph). These increases are due to rising costs of oil prices on World Markets, which affects the prices of oil based heating and transport fuels.

**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
	Jun	5.5	1.7	4.6	2.4	5.6	3.3

RPI was 5.6% in Jersey and 4.6% in the UK, compared to 5.5% in Guernsey.

The ten year trends as illustrated in *Figure 6* reveal a broadly similar cyclical trend for the three jurisdictions.

In Jersey, the Food, Housing, Fuel & Light and Motoring groups showed the greatest annual increases, contributing 3.7% to the 5.6% increase. The Clothing & Footwear group was to only Group to have a downward effect on the annual increase.

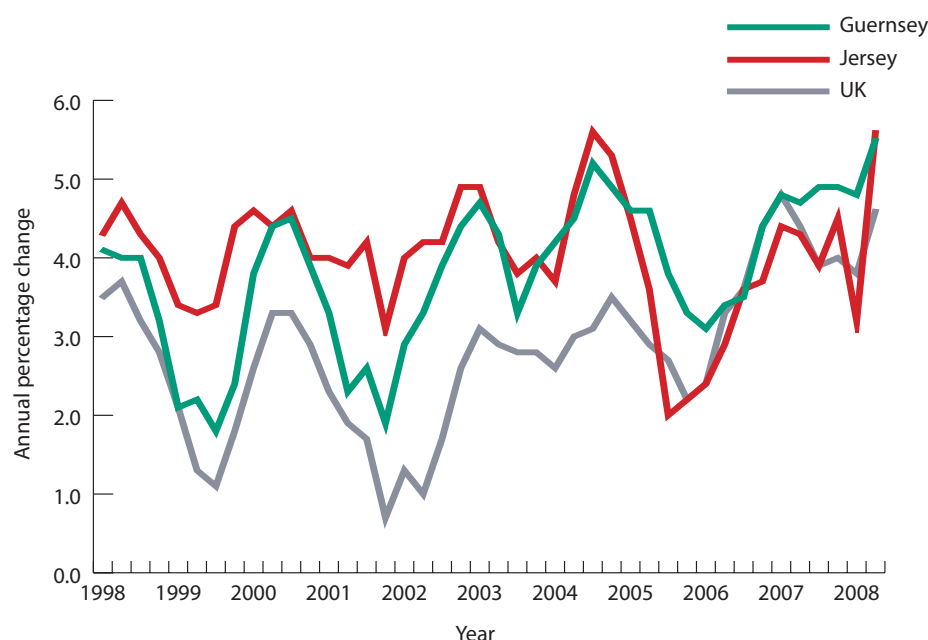
In the UK, prices of food and drink and transport costs made the largest upward contributions to the annual increase. Mortgage interest payments, had a downward effect.

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](http://www.statistics.gov.uk)  
 Jersey RPI: [www.gov.je/ChiefMinister/Statistics](http://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 5.4%, compared to 4.3% last quarter. This implies that although the mortgage interest component of the RPI decreased again this quarter, core inflationary pressures (as shown on *page 3*) continued to increase.

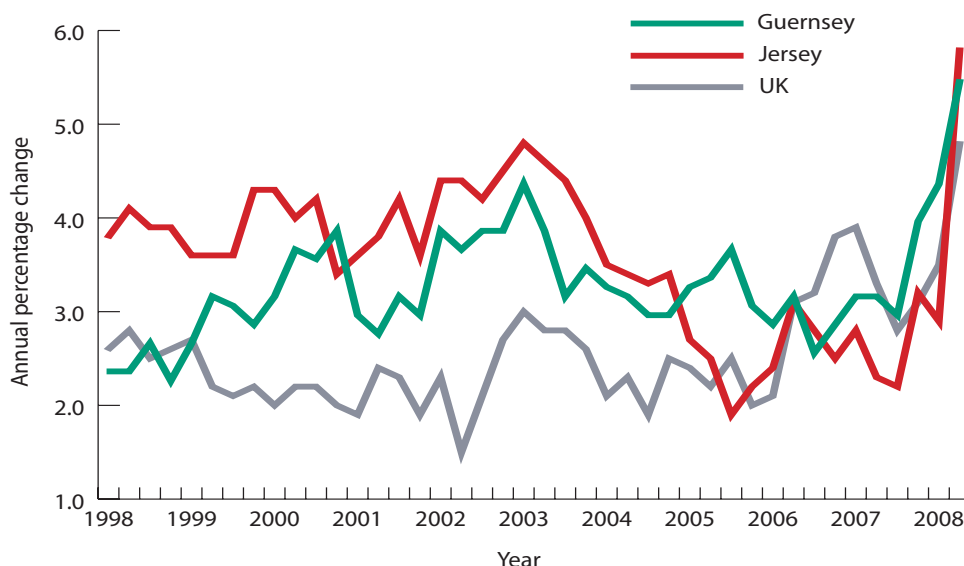
Guernsey's RPIX remained higher than that of the UK (4.8%), but was lower than that of Jersey (5.8%) this quarter. This indicates that core inflationary pressures in Guernsey were higher than in the UK, but lower than in Jersey over the twelve months ending June 2008.

There was a sharp increase in the RPIX in all three jurisdictions this quarter, reflecting rises in core inflationary pressures across Britain.

**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
	Jun	5.4	4.8	5.8

**Figure 7: RPIX - Guernsey, Jersey and UK**



# Methodology

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## 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 2008.

## 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

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

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