# **Guernsey Retail Prices Index**

# Quarter 3 - 30 September 2007

Issue Date - 19 October 2007



### 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 September 2007 Guernsey's annual rate of inflation was **4.9%**. This is 0.2 percentage points higher than the figure at the end of June 2007, which was 4.7%. The equivalent figures for the UK and Jersey were both 3.9%.
- Guernsey's RPIX (inflation excluding mortgage interest payments) is 0.2 percentage points lower than last quarter at **2.9**%
- The **Housing** group, which has the largest weight within the Index, contributed **2.6%** of the overall increase, which is the same as last quarter.
- The Index increased to **134.9** (1999 base).

#### **Overview**

The Guernsey RPI increased by 4.9% for all items ending 30th September 2007. This is higher than in June 2007, when the increase was 4.7%. Despite a relatively low quarterly increase (0.6%), there were large increases during the previous three quarters (*see Table 7*), resulting in a comparably large overall figure.

The Housing group continued to be the largest contributor to the RPI at 2.6% out of the overall figure. The continuing rise in this group is mainly due to the increasing cost of servicing a mortgage. This is a result of the combined effects of rising average house prices and interest rates, with another increase set by the Bank of England during the quarter.

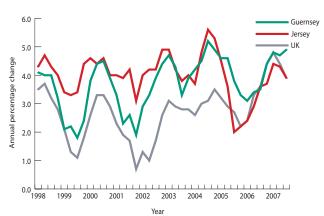
The next highest contributors were Food and Alcohol at 0.5%, followed by Fuel, Light and Power and Personal Goods at 0.3%.

The Clothing and Footwear group was the only group to have a downward effect on the Index over the year, contributing -0.3%.

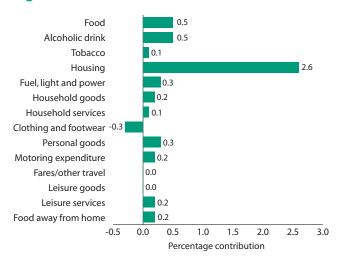
**Table 1: Annual Rates of Inflation** 

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	

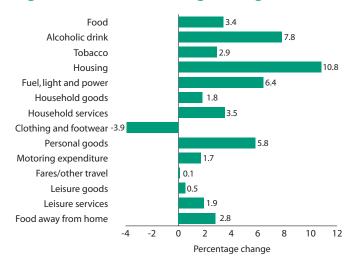
**Figure 1: Annual Rates of Inflation** 



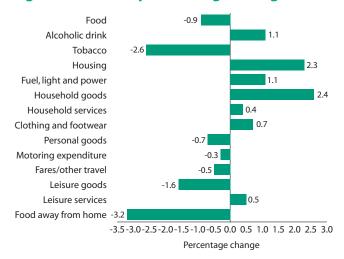
**Figure 2: Annual Contribution to RPI** 



**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 percentage change

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

During the last 12 months, Housing has increased by 10.8% (*Figure 3*), the largest percentage increase of all the groups. This group also has a large weighting, so remains the largest contributor (2.6% out of 4.9%).

The Alcoholic Drink group, increased by 7.8% since last September. It has a low weight, so this resulted in a overall RPI contribution of 0.5%.

Fuel, Light and Power and Personal Goods increased by 6.4% and 5.8% respectively over the year.

The Food group increased 3.4% over the year and since it holds the second highest weight in the RPI, it also contributed 0.5% to the overall annual RPI rate.

Clothing and Footwear was the only group to show a percentage decrease (-3.9%) over the year.

# Main contributions to the quarterly percentage change

Half of the groups showed decreases this quarter (see Figure 4). The largest decreases were seen in Food Away from Home (-3.2%) and Tobacco (-2.6%).

Food also decreased this quarter and since this group has the second largest weight, it had a significant downward effect on the quarterly change.

Household Goods and Housing showed the largest quarterly increases, 2.4% and 2.3% respectively. So despite decreases in other Groups, the increases in the heavily weighted Housing group, pushed the quarterly increase up.

Clothing and Footwear contributed to the increase this quarter, but decreased over the year.

# **RPI 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. The most salient of which are identified below.

#### Food (-0.9%)

Along with seasonal fluctuations in prices of some items throughout the year, potatoes, cooking oil and chicken showed the largest decreases this quarter. Increases were seen in the prices of several items including eggs and white bread.

#### **Alcohol (1.1%)**

The cost of wine, spirits and fortified wines purchased from retailers increased this quarter. There were no significant decreases. With the exception of cider, the price of alcohol has risen over the past 12 months, due to duty increases.

#### **Tobacco (-2.6%)**

Prices of cigarettes and tobacco decreased slightly this quarter, but all the prices increased during the 12 month period.

#### Housing Group (2.3%)

With four Bank of England interest rate rises during the last 12 months from 4.75% to 5% in November 2006 and currently 5.75% the effect of these increases are still being reflected in the index. This combined with higher house prices measured using a seven year moving average has inflated the cost of home ownership for Islanders with a mortgage. Many other prices in the Housing Group such as power tools and home purchase costs also increased. Although there was some deflation due mainly to materials used in home improvements.

#### Fuel, Light and Power (1.1%)

Prices of gas and electricity remained stable but heating oil prices increased this quarter, predominantly due to rising costs of crude oil in the World Market.

#### Household Goods (2.4%)

There were some increases in the group, including furniture, following summer sales. Furniture is heavily weighted, so this outweighted decreases in other household goods including soap products, toilet paper and spare parts for electrical goods.

#### Household Services (0.4%)

Repairs to personal goods, subs to trade unions and funeral costs were the only services to increase in price this quarter..

#### Clothing and Footwear (0.7%)

Clothing and Footwear prices fluctuate considerably. Increases in prices of women's outer clothing, including coats, jumpers and trousers (which have a higher weighting) outweighed decreases in men's underwear, jumpers and hosiery.

#### Personal Goods (-0.7%)

Most prices remained stable this quarter. Decreases in the cost of hairdressing and toilet requisites resulted in an overall decrease in this group.

#### **Motoring (-0.3%)**

Decreases in the cost of cars and petrol outweighed increases in breakdown insurance.

#### Fares & Other Travel (-0.5%)

The cost of sea travel to the Continent and Other Channel Islands decreased this quarter, however taxi fares and sea travel to England increased in cost.

#### **Leisure Goods (-1.6%)**

Increases in prices of books, HI-FIs and photographic goods combined with decreases in the cost of video cameras and CDs resulted in a decrease over the quarter.

#### Leisure Services (0.5%)

This increase was mainly a result of rises in the cost of fees for educational courses.

#### Food Away from Home (-3.2%)

There were decreases in the cost of meals out, but increases in the cost of fish and chip meals this quarter.

## **RPI Indices and Reflation Factors**

#### **Table 2: RPI Indices**

	March	luma	Camtanahan	December
	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	

### **Table 3: Percentage Change at Sept 2007**

Period	Percentage change
3 months	0.6
6 month	1.7
9 months	3.8
12 months	4.9
18 month	6.6
2 years	8.6
3 years	12.7
4 years	18.6
5 years	22.5
10 years	44.4

## **Table 4: Index Figures at Sept 2007**

Year of rebase (Index = 100)	Index Figures
1999	134.9
1994	160.2
1988	216.4
1983	289.2
1978	459.2

#### **Table 5: Reflation Factors for 2006**

Year	Reflation Factor
1995	1.48
1996	1.44
1997	1.38
1998	1.33
1999	1.30
2000	1.25
2001	1.23
2002	1.18
2003	1.13
2004	1.08
2005	1.04
2006	1.00

#### **RPI Indices**

RPI Indices are used to calculate change in prices over time. By determining the percentage change over one year, the annual RPI headline figures are calculated. The annual Index rose by 4.9% to 134.9 on 30th September 2007 (*Table 2*).

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

Take the most recent value and subtract the earlier value. Divide this number by the earlier value and multiply the answer by 100 to achieve a percentage figure.

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. The Indices as they stand at the end of December 2006 for the 1994, 1988, 1983 and 1978 bases along with the current base are shown in *Table 4*.

It is hoped that the next Guernsey Household Expenditure Survey will be completed later in 2007. The resulting new weights will be applied, along with updates to the shopping basket, to represent households' expenditure more appropriately. The index will then be rebased.

#### **Reflation Factors**

The effect of inflation is to erode the purchasing power of currency. Reflation factors (*Table 5*) can be used to convert old values to current prices. These figures are calculated annually. For example, £1 would buy more in 1996 than it would in 2006.

To convert a price, multiply it by the appropriate year's value. For example, £100 in 1996 is equivalent to £100 x 1.44 = £144 in 2006.

Reflation factors can also be used in the opposite way. To calculate what £100 in 2006 would have been worth in 1996 divide by the relevant reflation factor.

# **RPI Group Indices**

**Table 6: Group Indices** 

RPI Group	Weight	2006 Sept	2006 Dec	2007 Mar	2007 Jun	2007 Sept	Annual % change	Quarterly % change
Food	127	122.6	124.2	125.4	127.9	126.8	3.4	-0.9
Alcoholic Drink	52	156.9	156.8	167.3	167.2	169.1	7.8	1.1
Tobacco	19	263.8	264.1	274.4	278.6	271.5	2.9	-2.6
Housing	216	190.8	197.0	202.6	206.5	211.3	10.8	2.3
Fuel, Light and Power	41	163.9	167.7	164.5	172.6	174.5	6.4	1.1
Household Goods	79	127.5	125.7	129.1	126.8	129.8	1.8	2.4
Household Services	33	151.8	151.8	153.3	156.4	157.1	3.5	0.4
Clothing & Footwear	56	101.7	95.1	98.7	97.1	97.8	-3.9	0.7
Personal Goods	49	152.4	153.4	158.0	162.4	161.2	5.8	-0.7
Motoring Expenditure	85	140.0	142.9	144.5	142.8	142.4	1.7	-0.3
Fares/Other Travel	33	183.4	180.9	187.2	184.5	183.7	0.1	-0.5
Leisure Goods	63	102.9	103.1	104.5	105.1	103.4	0.5	-1.6
Leisure Services	92	162.8	164.2	164.8	165.0	165.8	1.9	0.5
Food Away from Home	55	149.8	149.2	151.3	159.1	154.0	2.8	-3.2

Individual group indices are presented for September 2006 to September 2007 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)

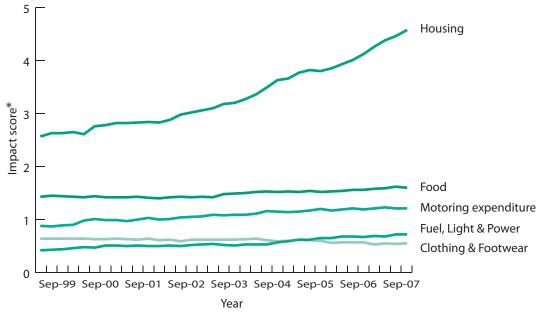
It is possible to use the group indices to track the impact of each group on the RPI over time. This is done by multiplying the index value by the group weight. The results of the most salient groups are presented graphically in *Figure 5*.

This quarter, the Housing group continued to show the fastest rate of increase shown by the steeper upward slope on the graph. Since this group has the highest weight, increases will have the highest impact on the overall Index.

Food decreased this quarter and Fuel, Light and Power, Clothing and Footwear and Motoring Expenditure remained stable.

Since these groups have the highest weights after housing, the stability shown this quarter combined with the break from the normal upward trend in Food offset the continued increase in Housing. This resulted in a relatively low quarterly increase. However, due to large increases overall since September 2006, the annual increase is still relatively high.

**Figure 5: Impact of RPI Group Indices** 



 $<sup>^*</sup>$ 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		U	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	

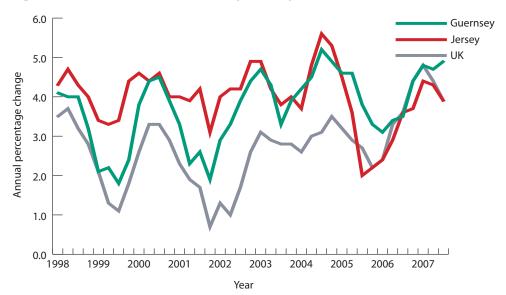
In the UK inflation fell to 3.9% this quarter. The quarterly changes for Guernsey and the UK were both low compared to the past three quarters, 0.6% and 0.4% respectively.

In the UK, increases were mainly due to housing, food and non-alcoholic beverages. However, the increase from housing was much less than in previous quarters. The main downward pressures came from household services (including average gas and electricity bills) and clothing and footwear (particularly winter coats).

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

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

Figure 6: Headline RPI - Guernsey, Jersey and UK



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 2.9%, which is lower than last quarter (3.1%).

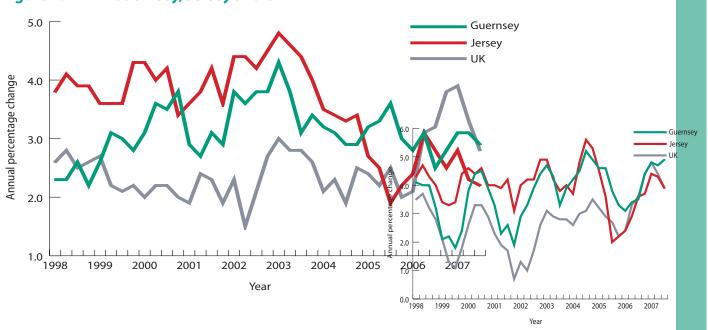
Both average mortgage interest rates and seven year rolling average house prices continue to rise, leading to a large increase in the mortgage interest component of the RPI. It is the item within the index with the largest weight, so changes to this figure tend to have a large effect on the RPI.

Guernsey's RPIX is slightly higher than that of the UK (2.8%) this quarter for the first time in over a year. This indicates that core inflationary pressures are greater in Guernsey this quarter than in the UK.

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

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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