

Guernsey Quarterly Inflation Bulletin

June 2022

Issue date 26th July 2022

The Guernsey Quarterly Inflation Bulletin presents details of two of the Retail Price Indices calculated for Guernsey each quarter; the RPI and the RPIX, which track how the prices of items within a “shopping basket” of goods and services have changed over time.



States of Guernsey
Data and Analysis

1.1 Introduction

The Guernsey RPIX and RPI are measures of price inflation that are published quarterly by the Data and Analysis Service. The “all items” RPI measures the average price inflation for private households including changes in mortgage interest payments. Changes made by the Bank of England to the base rate, which are reflected by Guernsey mortgage lenders, directly impact on the Guernsey RPI. This effect is not present in the RPIX, which excludes owner occupier housing costs. For more information on what each measure should be used for and other measures of price inflation, see the Guide that can be downloaded from <https://gov.gg/rpi>.

The December 2021 indices were the first to be calculated using the weights derived from the 2018-19 Household Expenditure Survey (see <https://gov.gg/household> for the results of that survey). These were due to be implemented in 2020, but methodological changes were put on hold when the Island went into lockdown in March 2020. Guidance issued by the UK Office for National Statistics and Eurostat was followed to ensure the indices calculated during 2020 and 2021 reflected as far as possible the changes in prices of goods and services that were actually available to consume (and were not skewed upward or downward by prices of goods and services that were unavailable, even if their prices continued to be advertised). As at December 2021, almost all of the goods and services in the basket were widely available for consumption for the first time since December 2019. To ensure the indices remain as representative as possible, the weights were updated, but with the impacts the COVID-19 pandemic had on spending patterns taken into account; the results of the 2021 Community Survey (see <https://gov.gg/covid19data> for the results of that survey) and air and sea passenger movement data were used to adjust the weights based on 2018-19 expenditure patterns before they were applied. The basket was also updated and now includes items such as hand sanitiser and face masks.

For more information on this and a summary of the methodology used to calculate the RPIs, see [Section 6.1](#) on [Page 13](#).

1.2 Headlines

- Inflation over the year ending in June 2022 as measured using the RPIX (“core” inflation excluding mortgage interest payments) was 7.0%. This is 1.1 percentage points higher than for the year ending in March 2022 and 4.7 percentage points higher than for the year ending in June 2021.
- The Motoring expenditure group contributed 1.6 percentage points to the annual change in the RPIX for the year ending in June 2022. The Fuel and light group contributed 1.1 points and the Food and Housing groups each contributed 0.9 points.
- The RPIX inflation figure for the UK for the year ending in June 2022 was 11.9%. The largest contribution to inflation in the UK RPI came from the Fuel and light group which included, for example, an increase of 98% in the average price of gas and an increase of 53% in the average price of electricity. The RPIX figure for Jersey was 6.5%.
- The “all items” RPI inflation was 6.8% over the year ending in June 2022, 1.2 percentage points higher than it was for the year ending in March 2022 and 4.6 percentage points higher than it was for the year ending in June 2021.
- The RPI figure for June 2022 for the UK was 11.8% and for Jersey it was 7.9%.

2.1 RPIX and RPI overview

Figure 2.1.1 Annual percentage change in RPIX

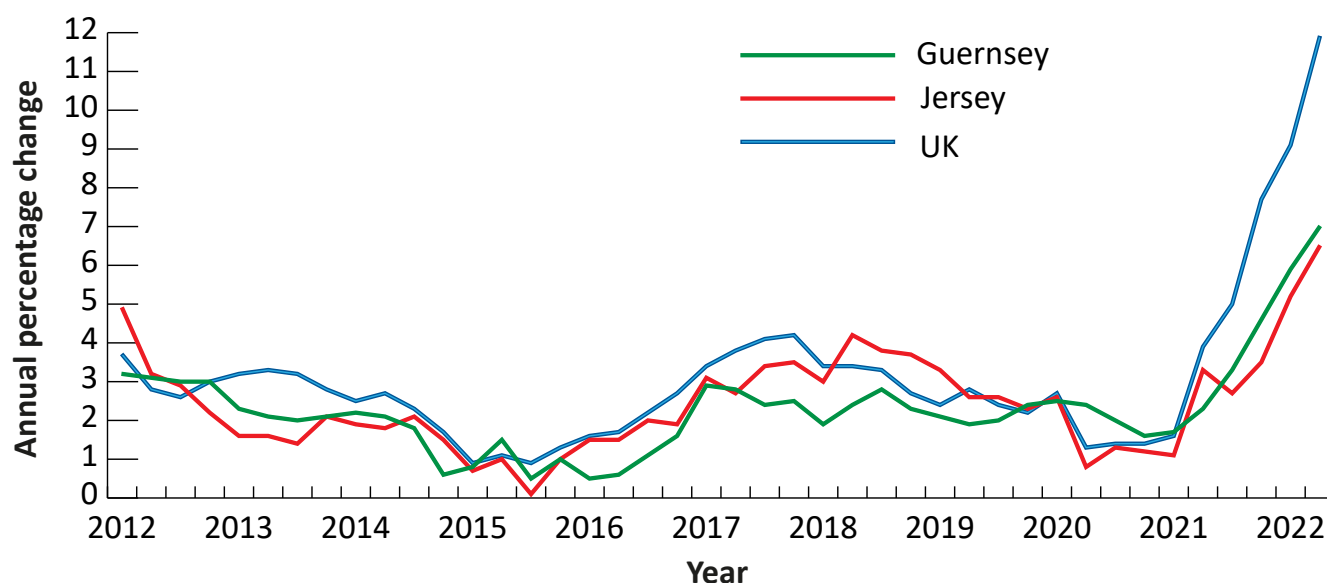


Table 2.1.1 RPIX overview

		Annual % change	Quarterly % change	Index (2008 base)
2019	Jun	1.9	1.1	126.9
2019	Sep	2.0	-0.1	126.8
2019	Dec	2.4	0.1	126.9
2020	Mar	2.5	1.4	128.7
2020	Jun	2.4	1.0	129.9
2020	Sep	2.0	-0.4	129.4
2020	Dec	1.6	-0.3	128.9
2021	Mar	1.7	1.5	130.9
2021	Jun	2.3	1.6	132.9
2021	Sep	3.3	0.5	133.6
2021	Dec	4.6	0.9	134.8
2022	Mar	5.9	2.8	138.6
2022	Jun	7.0	2.6	142.2

The annual change in the RPIX was 7.0% at the end of June 2022, 1.1 percentage points higher than in the previous quarter and 4.7 percentage points higher than in June 2021 (see [Table 2.1.1](#) and [Figure 2.1.1](#)).

The quarterly change in the RPIX was 2.6% during the three month period ending June 2022, 0.2 percentage points lower than the previous quarter and 1.0 percentage point higher than June 2021. Quarterly changes in the RPIX are subject to seasonal variations in price levels, with the first two quarter changes often the highest.

The annual change in the UK RPIX was 11.9% at the end of June 2022 and in Jersey it was 6.5%.

More information on the differences in RPIX in Guernsey, Jersey and the UK can be found on [Page 12](#).

2.1 RPIX and RPI overview

Figure 2.1.2 Annual percentage change in RPI

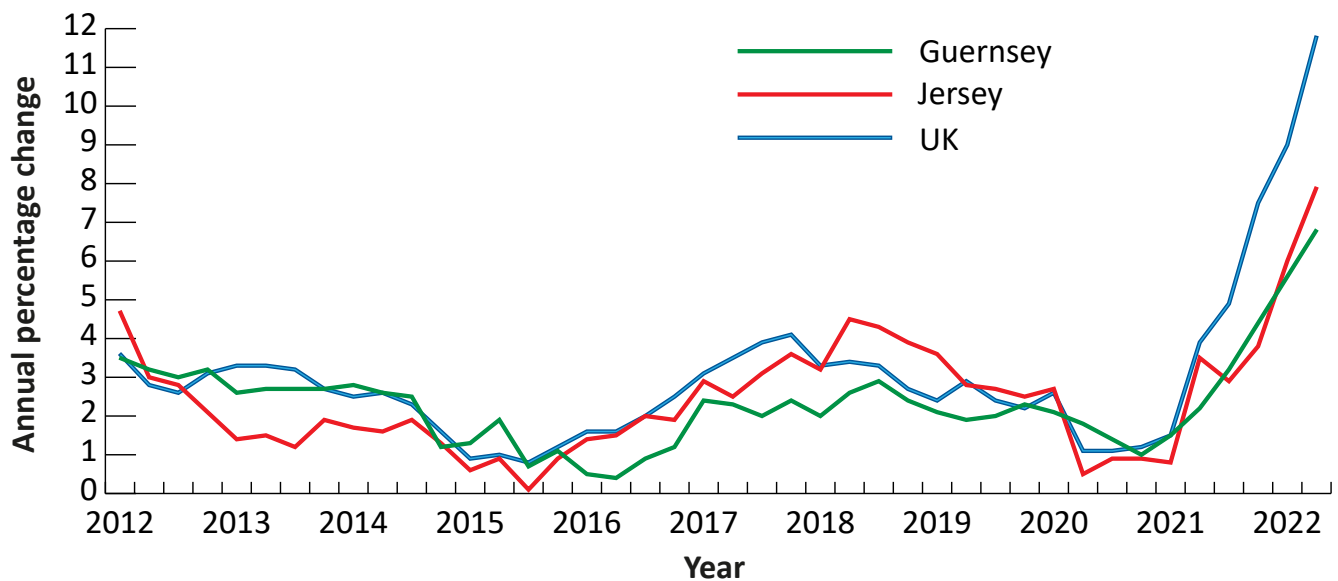


Table 2.1.2 RPI overview

		Annual % change	Quarterly % change	Index (2008 base)
2019	Jun	1.9	1.0	123.7
2019	Sep	2.0	0.0	123.7
2019	Dec	2.3	0.0	123.7
2020	Mar	2.1	1.0	125.0
2020	Jun	1.8	0.8	125.9
2020	Sep	1.4	-0.4	125.4
2020	Dec	1.0	-0.3	125.0
2021	Mar	1.5	1.5	126.9
2021	Jun	2.2	1.4	128.7
2021	Sep	3.2	0.5	129.4
2021	Dec	4.4	0.9	130.5
2022	Mar	5.6	2.7	134.0
2022	Jun	6.8	2.6	137.5

The annual change in the RPI was 6.8% in June 2022, which was 1.2 percentage points higher than the previous quarter and 4.6 points higher than in June 2021 (see [Figure 2.1.2](#) and [Table 2.1.2](#)).

The annual change in the UK RPI was 11.8% at the end of June 2022 and in Jersey it was 7.9%.

The quarterly change in the RPI for the quarter ending in June 2022 was 2.6%, which is 0.1 percentage points lower than the previous quarter and 1.2 percentage points higher than the quarter ending June 2021. As for the RPIX, quarterly changes in the RPI are subject to seasonal variation; however, the RPI can be dominated by trends in mortgage interest payments.

More information on the differences in RPI in Guernsey, Jersey and the UK can be found on [Page 12](#).

2.2 The “formula effect”

The “formula effect” is the term used to describe the difference the method of averaging can have on a calculated average price change.

The Dutot method is the one that is used within the Guernsey RPIs and this is seen to be acceptable when the goods and services priced within any one element of the calculation are homogeneous or nearly homogeneous i.e. of similar values. The homogeneity is achieved via careful selection of items within the basket of goods and services.

However, there are alternative methods that can be used; the Carli method (used in UK RPI calculations) and the Jevons method (used in Jersey RPI calculations and UK CPI calculations). Neither of these are impacted by the range of prices collected in the way that the Dutot method is.

However, the Jevons method assumes that some people modify what they buy to a certain extent when faced with large price increases, whereas Carli and Dutot assume people always buy the same items and, as such, Jevons is deemed to more accurately model real behaviours.

For transparency, the value of the formula effect since the quarter ending March 2021 is included in **Table 2.2.1**. This is the difference between the RPI and RPIX when calculated using the Dutot method and when calculated using the Jevons method. A negative value in **Table 2.2.1** indicates that the Jevons method would have produced a lower percentage change for the given time period and a positive value indicates that the Jevons method would have produced a higher percentage change for the given time period. More information on the formula effect can be found in the **Guide to the Guernsey Price Inflation Indices**, which is available online at www.gov.gg/rpi and includes a worked example of the Carli, Dutot and Jevons methods of calculating average price changes.

Table 2.2.1 Value of formula effect in percentage points

		For RPI annual % change	For RPI quarterly % change	For RPIX annual % change	For RPIX quarterly % change
2021	Mar	-	-0.1	-	-0.2
2021	Jun	-	0.0	-	0.0
2021	Sep	-	0.1	-	0.1
2021	Dec	-0.1	0.0	-0.1	0.0
2022	Mar	0.1	0.0	0.1	0.0
2022	Jun	0.3	0.1	0.3	0.2

3.1 Group analysis

Table 3.1.1 Group content summary

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

Calculation of the RPIs involves calculating nearly 600 individual items indices based on the average changes in prices of goods and services. The changes are weighted and used to update 14 group indices and the overall index.

Table 3.1.1 provides a summary of the goods and services included within each of the 14 groups. For more information on how the indices are aggregated and the weights applied (and how these have changed over time), see the Guide that can be downloaded from <https://gov.gg/rpi>.

3.1 Group analysis

Figure 3.1.1 shows the percentage change in each of the 14 RPI and RPIX groups over the year ending June 2022. **Figure 3.1.2** shows the number of percentage points contributed over the same time period to the annual change in the overall indices by each group. Only the Housing group can show a different annual 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 overall RPI compared with the overall RPIX can differ.

In the year ending June 2022, all fourteen of the RPIX and RPI groups saw an annual increase. The Fuel and light expenditure group saw the largest annual increase at 23.0%, contributing 1.1% to the RPIX and 1.0% to the RPI changes. The Motoring expenditure group increased by 15.7% and contributed 1.6% to the annual changes in RPIX and 1.5% to the RPI. The Housing percentage increase was smaller, but its contribution to the overall annual percentage changes was high, at 0.9% for RPIX and 1.0% for RPI. The Food group saw its annual highest increase since 2008, at 7.1%, contributing 0.9 percentage points to the change in RPIX and 0.8 to the change in RPI.

Figure 3.1.1 Annual percentage change

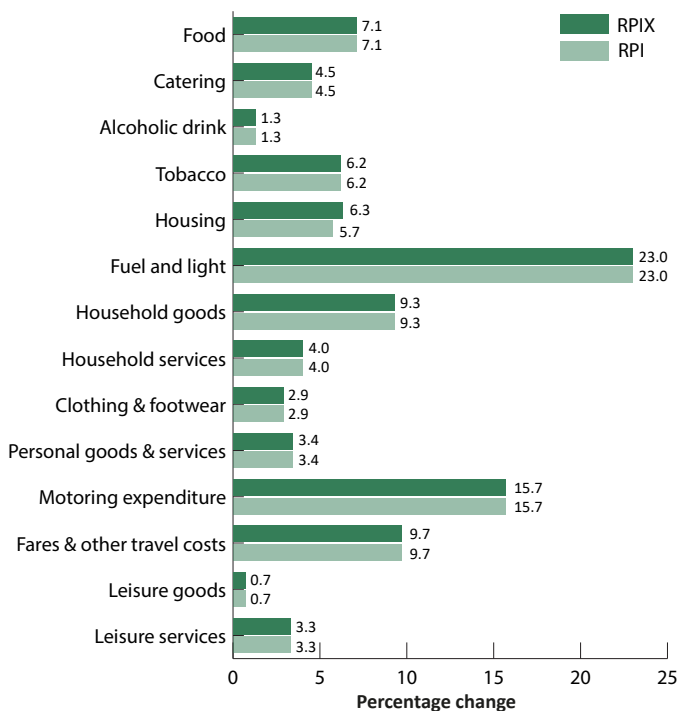
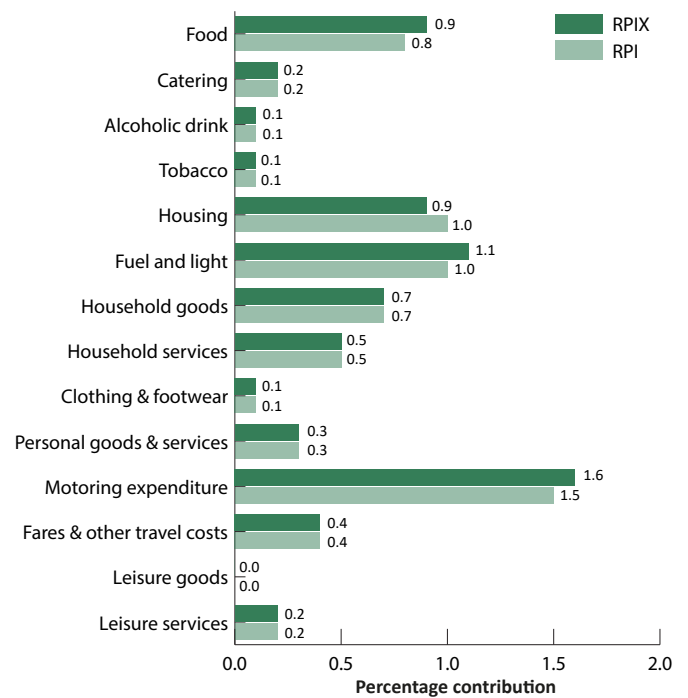


Figure 3.1.2 Annual contribution



NB: Due to the effects of rounding, the sum of the individual group contributions may not add up to the total change

3.2 Group analysis - quarterly

Figure 3.2.1 Quarterly percentage change

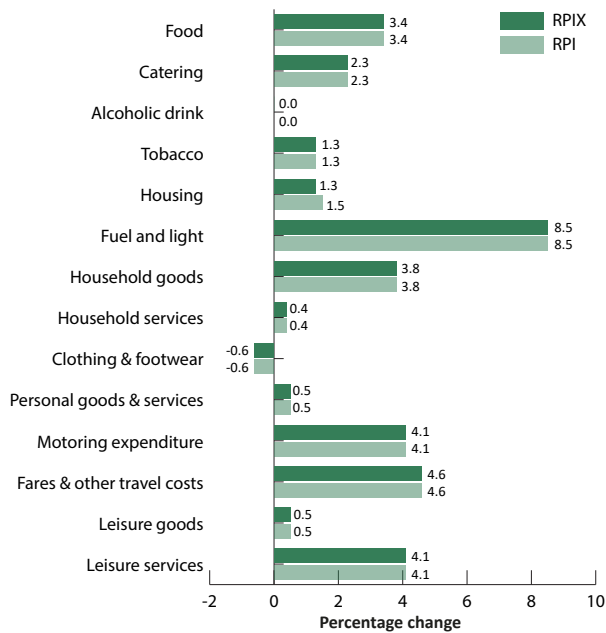
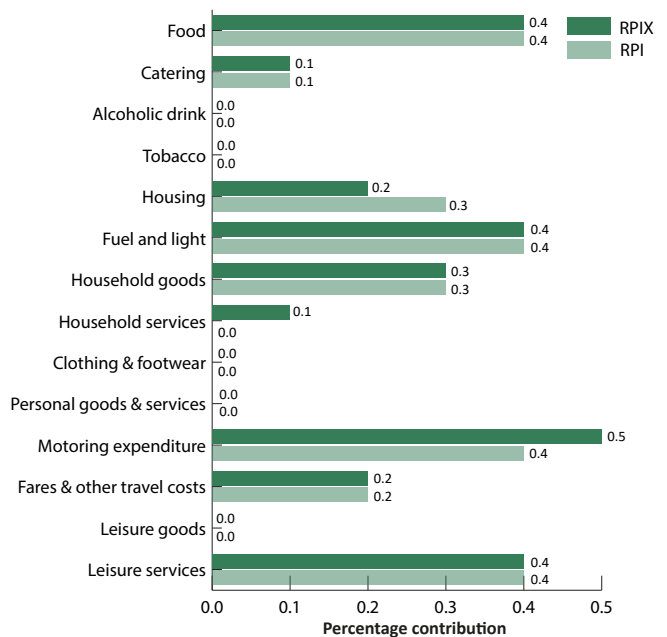


Figure 3.2.2 Quarterly contribution



NB: Due to the effects of rounding, the sum of the individual group contributions may not add up to the total change

Thirteen of the fourteen RPIX and RPI groups saw an average price increase in the three months ending in June 2022 (Figure 3.2.1).

The largest quarterly percentage increase (8.5%) came from the Fuel & light group, making a contribution of 0.4 percentage points to the quarterly changes (Figure 3.2.2). Fares & other travel costs increased by 4.6%, contributing 0.2 percentage points to the overall change, whilst Motoring expenditure contributed 0.5 points to the quarterly increase in RPIX and 0.4% to the RPI.

Further details of the changes by group over the quarter can be found on [pages 9 and 10](#).

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 in brackets are the quarterly changes for each group.

Food (3.4%)

There were several seasonal fruit and vegetable price changes this quarter, as well as increases in the prices of many food items - almost 60% of the food items monitored saw increases this quarter, whilst 30% remained the same and 10% saw prices reduce, primarily due to special offers. The 3.4% increase was the highest quarterly change in the food group since 2007.

Catering (2.3%)

There were increases in the prices of takeaway items, cafe drinks and some restaurant main courses.

Alcoholic drink (0.0%)

This quarter saw higher prices for some shop bought spirits and pub beers, offset by special offers in some shop-bought ciders and rose wines.

Tobacco (1.3%)

This quarter saw small increases in some cigarette prices.

Housing (1.3% RPIX, 1.5% RPI)

The weightings within the Housing element of the RPIX and the RPI calculations are different. The mortgage interest component is excluded from the RPIX calculations but has a high weighting in the RPI calculations. The mortgage interest item increased in price this quarter and the weighted increase was higher than increases in other items in this group, so the RPI Housing group increase was higher than the RPIX Housing group increase. There were increases in dwelling insurance premiums, many DIY items, and small increases in the owner's and refuse rates.

Fuel and light (8.5%)

The increase in the prices within this group was largely driven by increases in the price of kerosene this quarter - the average price for kerosene increased by 30% during the quarter. There were no changes in the prices of electricity or gas during the quarter (gas and electricity saw high price rises in the UK during this quarter). The 8.5% increase was the highest quarterly change for this group since 2009.

Household goods (3.8%)

This quarter saw increases in the prices of a variety of items, including cleaning products, kitchen furniture and household appliances.

Household services (0.4%)

Most household service prices remained unchanged during this quarter, but there were some increases in the prices of delivery and postal charges, childminder fees and pet insurance.

3.2 Group analysis - quarterly (continued)

Clothing and footwear (-0.6%)

There were price reductions in many items of clothing, including women's dresses, swimwear and children's T-shirts, as well as increases in the prices of others, including hats, men's shorts and women's nightwear.

Personal goods and services (0.5%)

This quarter the prices of many items remained unchanged. There were increases in the prices of some items, including hospital charges and nappies.

Motoring expenditure (4.1%)

Petrol and diesel price increases were the main contributors to this quarter's increase, with smaller increases in the prices of new and second hand cars and roadside recovery services.

Fares and other travel (4.6%)

There were seasonal changes in ferry fares and air fares, as well as increases in the prices of hire cars and taxi fares.

Leisure goods (0.5%)

This quarter there were increases in the prices of DVDs, some toys and sleeping bags. There were reductions in the prices of smart speakers, computer games and water sports equipment.

Leisure services (4.1%)

The biggest increases were in prices of accommodation and holidays within the Channel Islands, including self-catering holidays. Holidays outside the Channel Islands saw a smaller increase but, as the weighting on these is higher, it had a bigger impact in the inflation rate changes.

4.1 Cumulative changes, reflation factors and indices

Table 4.1.1 RPIX cumulative changes and reflation factors to 30th June 2022

	Cumulative % change	Reflation factor
3 months	2.6	1.03
6 months	5.4	1.05
9 months	6.4	1.06
12 months	7.0	1.07
15 months	8.7	1.09
18 months	10.3	1.10
2 years	9.4	1.09
3 years	12.1	1.12
4 years	14.2	1.14
5 years	16.9	1.17
10 years	27.9	1.28

Table 4.1.2 RPI cumulative changes and reflation factors to 30th June 2022

	Cumulative % change	Reflation factor
3 months	2.6	1.03
6 months	5.4	1.05
9 months	6.3	1.06
12 months	6.8	1.07
15 months	8.3	1.08
18 months	9.9	1.10
2 years	9.2	1.09
3 years	11.1	1.11
4 years	13.2	1.13
5 years	16.1	1.16
10 years	28.2	1.28

Table 4.1.3 RPIX and RPI index figures at 30th June 2022

Year of base	RPIX index	RPI index
1949	-	4,246.4
1965	-	2,480.4
1974	-	1,368.0
1978	-	662.1
1983	-	417.0
1988	-	312.1
1994	-	230.9
1998	198.2	199.4
2008	142.2	137.5
2014	122.3	120.9
2021	106.4	106.3

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 reflation 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 June 2012 is equivalent to £100 x 1.28 = £128 in June 2022.

Reflation factors can also be used in the opposite way. To calculate what £100 in 2022 would have been worth in 2012, 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 2021. Full time series of index figures for each base are available on our website (www.gov.gg/rpi).

5.1 UK and Jersey inflation rates

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

		Guernsey	UK	Jersey
2017	Jun	2.8	3.8	2.7
	Sep	2.4	4.1	3.4
	Dec	2.5	4.2	3.5
2018	Mar	1.9	3.4	3.0
	Jun	2.4	3.4	4.2
	Sep	2.8	3.3	3.8
2019	Dec	2.3	2.7	3.7
	Mar	2.1	2.4	3.3
	Jun	1.9	2.8	2.6
2020	Sep	2.0	2.4	2.6
	Dec	2.4	2.2	2.3
	Mar	2.5	2.7	2.6
2021	Jun	2.4	1.3	0.8
	Sep	2.0	1.4	1.3
	Dec	1.6	1.4	1.2
2022	Mar	1.7	1.6	1.1
	Jun	2.3	3.9	3.3
	Sep	3.3	5.0	2.7
2022	Dec	4.6	7.7	3.5
	Mar	5.9	9.1	5.2
	Jun	7.0	11.9	6.5

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

		Guernsey	UK	Jersey
2017	Jun	2.3	3.5	2.5
	Sep	2.0	3.9	3.1
	Dec	2.4	4.1	3.6
2018	Mar	2.0	3.3	3.2
	Jun	2.6	3.4	4.5
	Sep	2.9	3.3	4.3
2019	Dec	2.4	2.7	3.9
	Mar	2.1	2.4	3.6
	Jun	1.9	2.9	2.8
2020	Sep	2.0	2.4	2.7
	Dec	2.3	2.2	2.5
	Mar	2.1	2.6	2.7
2021	Jun	1.8	1.1	0.5
	Sep	1.4	1.1	0.9
	Dec	1.0	1.2	0.9
2022	Mar	1.5	1.5	0.8
	Jun	2.2	3.9	3.5
	Sep	3.2	4.9	2.9
2022	Dec	4.4	7.5	3.8
	Mar	5.6	9.0	6.0
	Jun	6.8	11.8	7.9

Table 5.1.1 and **Table 5.1.2** show the comparable RPIX and RPI inflation rates reported by the UK Office for 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 March 2014 inflation results. The [Guide to the Guernsey Price Inflation Indices](#), which is available online from www.gov.gg/rpi, provides more detail 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 2018-19 survey are available from www.gov.gg/household and the weights derived from the 2018-19 survey were implemented in January 2022 (to the price inflation between September and December 2021).

Note on the impact of COVID-19 on the inflation indices

The prices used to calculate the inflation rates are collected as close to the end of each quarter as possible in order to give a snapshot at that point in time. When social distancing measures were brought in in March 2020, many of the prices had not yet been collected. As many as possible were gathered by phone or email instead of shop visits. However, with many retail and hostelry establishments either being closed or exceptionally busy during this period, fewer prices than normal could be collected. Advice was sought from the UK Office for National Statistics, who shared the guidance provided by Eurostat on how to maintain the indices in these circumstances. The guidance covered two areas:

1. Goods and services that were still available to purchase, such as grocery items, medicines etc, but for which prices could not be collected. In this event, the missing prices were assumed to have changed in the same way that other, similar prices had changed, e.g. if prices could not be collected from a particular shop, the prices of items from that shop were assumed to have changed by the same proportion as prices of those same items from other shops.
2. Goods and services that were not available, such as flights, hairdressing services etc, even if prices could still be collected from websites etc. The prices were assumed to have either:
 - i. remained the same as for the previous quarter (for prices not affected by seasonal variations), or
 - ii. changed in the same way they would have changed at the same time in previous years (for prices susceptible to seasonal variations)

6.1 Methodology

It is normal for assumptions or imputations, such as these, to be made and included in the calculation of the indices, when a particular item is out of stock for example. However, it is not normal for these to be applied so widely. Price collection continued to be impacted to some extent up to and including June 2021.

By handling price collection as described above regarding individual goods and services that were not available for consumption at the end of each quarter of 2020 and 2021, only the changes in prices of items available to consume will have resulted in changes in the published indices.

The basket and weights, which were due to be updated in 2020 to reflect the results of the 2018-2019 Household Expenditure Survey were not updated until lockdown measures had been lifted in late 2021. The measures were lifted in phases and the routine updates to the indices were postponed until all goods and services were available to be bought and consumed again. By this time, new data had become available via the 2021 Community Survey to inform how the 2018-19 Expenditure Survey results needed to be adjusted to better reflect 2022 expenditure patterns. The routine up-dating of the weights was undertaken in January 2022 i.e. first applied to the December 2021 indices and the quarterly changes between September and December 2021 indices.

By taking this approach, it is hoped that the clearest possible picture of the impacts on retail prices of the coronavirus pandemic has been provided, whilst enabling continuity of the indices to be maintained in exceptional circumstances.

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 inflation hotline telephone number is 01481 227012.

The next inflation bulletin (for September 2022) will be published at 9:30am on Tuesday 25th October 2022.

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

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For more information
go to gov.gg/data