Guernsey Quarterly Inflation Bulletin

December 2023 Issue date 23rd January 2024

The Guernsey Quarterly Inflation Bulletin presents details of the Retail Price Indices and Household Cost Indices calculated for Guernsey each quarter. These track how the prices of items within a "shopping basket" of goods and services have changed over time.



1.1 Introduction

The Guernsey Quarterly Inflation Bulletin has been expanded to include all the Retail Prices Indices (RPIs) that are calculated each quarter and a set of Household Cost Indices (HCIs). They all use weights derived from the 2018-19 Household Expenditure Survey (see https://gov.gg/household for the results of that survey) and the same "shopping basket" of goods and services. The survey is being conducted again in 2023-24, and more information can be found at https://gov.gg/hes.

There are four RPI measures for Guernsey:

RPI - all items

RPIX - excludes mortgage interest payments

RPICT- excludes mortgage interest payments and the effect of changes to indirect taxes

RPIY - excludes mortgage interest payments and indirect taxes

The RPIs are intended to measure the overall average level of inflation experienced by people living in self-contained households in Guernsey. The RPIX measures inflation without including changes in mortgage interest payments, which are directly affected by changes made by The Bank of England (BoE) to the base rate in the UK. The RPIY measures what the RPIX would be if indirect taxes (such as excise duty and property taxes) were not charged. The RPICT measures what the RPIX would be if indirect tax levels did not change. The RPICT and RPIY both exclude the elements of inflation that can be directly influenced by government, but in slightly different ways.

To aid understanding of the differences in rates of price inflation being experienced by different types of household in Guernsey, thirteen HCI measures have been developed for Guernsey, following a method designed by the UK Office for National Statistics (UK ONS):

Low income vs. **high income** households

Households containing one or more child(ren) vs. households with none

Households containing one or more retired person vs. households with none

Households containing one or more person with a disability or long term illness that limits their activities vs. households with none

Owner occupier households without mortgage vs. Owner occupier households with mortgage vs. Private renter households vs. Social renter and partial owner households

Overall HCI (for reference)

They all include changes in mortgage interest payments and indirect taxes. The HCI measures are designed to show how inflation rates for particular types of households compare with each other and with the overall average. They are intended to be compared with each other but not with the RPIs, due to methodological differences:

- To give lower spending households the same level of representation within the figures as higher spending ones, the weights for the HCIs are calculated using a different method to that used for the RPIs.
- For comparability with figures published for the UK, the average price changes used within the HCI calculations are calculated using a different method to that used in the RPI calculations.

For more information on methodologies used, see Section 4.1 on Page 16 and the Guide to the Guernsey Price Inflation Indices that can be downloaded from https://gov.gg/rpi, which also provides guidance on what each measure is intended to be used for.

1.2 Headlines

- The "all items" RPI inflation was 6.3% over the year ending December 2023, 2.2 percentage points lower than it was over the year ending in December 2022 and 0.7 points lower than it was over the year ending in September 2023.
- Inflation over the year ending in December 2023, as measured using the RPIX ("core" inflation excluding mortgage interest payments), was 5.5%. This is 3.0 percentage points lower than for the year ending in December 2022 and 0.8 points lower than it was over the year ending in September 2023.
- "Underlying" inflation, can be measured using the RPICT (inflation excluding mortgage interest
 payments and assuming constant taxes) or the RPIY (inflation excluding mortgage interest
 payments and indirect taxes), which increased by 5.3% and 5.4% respectively over the year ending
 in December 2023.
- The Housing group contributed 2.0 percentage points to the annual change in the RPI for the year ending in December 2023, and the Food group contributed 0.9 percentage points.
- Within the RPI, the groups of goods and services that increased the most in price over the year ending in December 2023 were: the Housing group (which increased by 11.8%), the Leisure services group (which increased by 8.1%) and the Household services group (which increased by 7.5%).
- Within the RPI, the biggest quarterly increase was seen in the Fares and other travel costs group, which increased by 2.4% in the quarter ending in December 2023.
- The HCIs, which are all "all items" indices (intended to enable comparison of inflation rates experienced by households in different circumstances), increased by between 5.1% and 7.6% over the year ending in December 2023; the biggest range was seen in the indices for households with different housing tenures.
- For the year ending in December 2023, the index for Social renter and partial owner households was the HCI with the highest overall increase, at 7.6% (1.3 percentage points above the increase in the overall average HCI). Staple goods and services increased by 8.2% on average for these households and contributed 6.0 percentage points to the 7.6% increase in their index, whilst additional goods and services increased by 5.8% on average and contributed 1.5 percentage points.
- For the year ending in December 2023, the index for Private renter households was the HCI with the lowest overall increase, at 5.1% (1.2 percentage points below the increase in the overall average HCI). Staple goods and services increased by 5.6% on average for Private renter households and contributed 3.7 percentage points to the 5.1% increase in their index, whilst additional goods and services increased by 4.0% on average and contributed 1.3 percentage points.

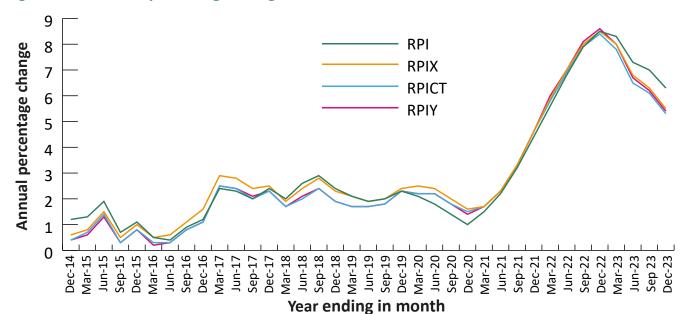


Figure 2.1.1 Annual percentage change in RPI, RPIX, RPICT and RPIY

Table 2.1.1 Annual percentage change in RPI, RPIX, RPICT and RPIY (for the year ending in the month shown)

		RPI	RPIX	RPICT	RPIY
2018	Dec	2.4	2.3	1.9	1.9
2019	Mar	2.1	2.1	1.7	1.7
2019	Jun	1.9	1.9	1.7	1.7
2019	Sep	2.0	2.0	1.8	1.8
2019	Dec	2.3	2.4	2.3	2.3
2020	Mar	2.1	2.5	2.2	2.2
2020	Jun	1.8	2.4	2.2	2.2
2020	Sep	1.4	2.0	1.8	1.8
2020	Dec	1.0	1.6	1.5	1.4
2021	Mar	1.5	1.7	1.7	1.7
2021	Jun	2.2	2.3	2.3	2.3
2021	Sep	3.2	3.3	3.3	3.3
2021	Dec	4.4	4.6	4.6	4.6
2022	Mar	5.6	5.9	5.8	6.0
2022	Jun	6.8	7.0	6.9	7.0
2022	Sep	7.9	8.0	7.9	8.1
2022	Dec	8.5	8.5	8.4	8.6
2023	Mar	8.3	8.0	7.8	8.0
2023	Jun	7.3	6.8	6.5	6.7
2023	Sep	7.0	6.3	6.1	6.2
2023	Dec	6.3	5.5	5.3	5.4

The annual change in the RPI (all items) for the year ending in December 2023 was 6.3%, compared with 8.5% for the year ending December 2022 and 7.0% for the year ending September 2023.

The annual change in the RPIX (excluding mortgage payments) for the year ending in December 2023 was 5.5%, compared with 8.5% for the year ending December 2022 and 6.3% for the year ending September 2023.

The annual change in the RPICT (excluding mortgage payments and with indirect taxes kept constant) for the year ending in December 2023 was 5.3%, compared with 8.4% for the year ending December 2022 and 6.1% for the year ending September 2023.

The annual change in the RPIY (excluding mortgage payments and with indirect taxes also excluded) for the year ending in December 2023 was 5.4%, compared with 8.6% for the year ending December 2022 and 6.2% for the year ending September 2023.

More information on the differences between the RPIs can be found on Page 7 and in the Guide to the Guernsey Price Inflation Indices that can be downloaded from https://gov.gg/rpi.

Table 2.1.2 Quarterly percentage change in RPI, RPIX, RPICT and RPIY (for the quarter ending in the month shown)

		RPI	RPIX	RPICT	RPIY
2018	Dec	-0.3	-0.3	-0.5	-0.5
2019	Mar	1.2	1.3	1.3	1.2
2019	Jun	1.0	1.1	1.1	1.1
2019	Sep	0.0	-0.1	0.0	0.0
2019	Dec	0.0	0.1	0.0	0.0
2020	Mar	1.0	1.4	1.2	1.2
2020	Jun	0.8	1.0	1.0	1.0
2020	Sep	-0.4	-0.4	-0.4	-0.4
2020	Dec	-0.3	-0.3	-0.3	-0.3
2021	Mar	1.5	1.5	1.5	1.4
2021	Jun	1.4	1.6	1.6	1.6
2021	Sep	0.5	0.5	0.6	0.6
2021	Dec	0.9	0.9	0.9	0.9
2022	Mar	2.7	2.8	2.7	2.7
2022	Jun	2.6	2.6	2.6	2.7
2022	Sep	1.6	1.5	1.5	1.6
2022	Dec	1.4	1.4	1.4	1.4
2023	Mar	2.5	2.3	2.1	2.2
2023	Jun	1.6	1.4	1.4	1.4
2023	Sep	1.3	1.1	1.1	1.1
2023	Dec	0.8	0.6	0.6	0.6

The quarterly change in the RPI (all items) for the quarter ending in December 2023 was 0.8%, compared with 1.4% for the quarter ending December 2022 and 1.3% for the quarter ending September 2023.

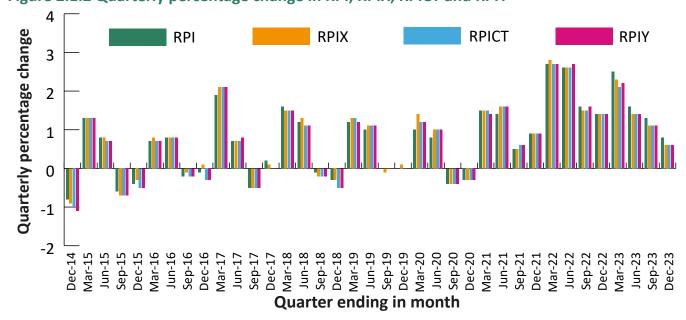
The quarterly change in the RPIX (excluding mortgage payments) for the quarter ending in December 2023 was 0.6%, compared with 1.4% for the quarter ending December 2022 and 1.1% for the quarter ending September 2023.

The quarterly change in the RPICT (excluding mortgage payments and with indirect taxes kept constant) for the quarter ending in December 2023 was 0.6%, compared with 1.4% for the quarter ending December 2022 and 1.1% for the quarter ending September 2023.

The quarterly change in the RPIY (excluding mortgage payments and with indirect taxes also excluded) for the quarter ending in December 2023 was 0.6%, compared with 1.4% for the quarter ending December 2022 and 1.1% for the quarter ending September 2023.

More information on the differences between the RPIs can be found on Page 7 and in the Guide that can be downloaded from https://gov.gg/rpi.

Figure 2.1.2 Quarterly percentage change in RPI, RPIX, RPICT and RPIY



2.2 The "formula effect" within the RPIs

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 within the changes in the RPI and RPIX since the quarter ending March 2021 is included in **Table 2.2.1**. This is the difference between calculating using the Dutot method and calculating using the Jevons method. A positive 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 negative 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 https://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

		Value of effect within RPI	Value of effect within RPI	Value of effect within	Value of effect within
		annual % change	quarterly % change	RPIX annual % change	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
2022	Sep	0.2	0.0	0.2	0.0
2022	Dec	0.1	-0.1	0.1	-0.1
2023	Mar	0.1	0.0	0.1	0.0
2023	Jun	0.0	0.0	0.0	0.0
2023	Sep	-0.1	-0.1	-0.1	-0.1
2023	Dec	-0.1	0.0	-0.1	0.0

The HCIs (provided in Section 3) use the Jevons method, so are not impacted by the formula effect.

Table 2.3.1 RPI group content summary

Group	Items included	
Food	Supermarket and other shop bought food and non-alcoholic beverages	
Catering	Restaurant, café, pub, bar, canteen and take-away food and non-alcoholic drinks	
Alcoholic drink	On and off premises sales of alcoholic drinks	
Tobacco	Tobacco based products and e-cigarettes	
Housing	Rents, mortgage interest payments, TRP, parish rates, waste charges, water charges, materials and tools for repairs and DIY, plumbers, electricians etc.	
Fuel & light	Electricity, oil, coal, gas	
Household goods	Furniture, carpets, rugs, soft furnishings, kitchen and dining ware, cleaning products, household appliances, pet care, stationery and postage	
Household services	Phone, internet, child minder, home help, cleaner and other fees and charges	
Clothing & footwear	Clothes, shoes, accessories	
Personal goods & services	Glasses, contact lenses, medical, cosmetic and sanitary products. Jewellery, watches, bags and personal appliances. Medical, dental and beauty treatments.	
Motoring expenditure	Vehicle purchase and maintenance, motor fuel	
Fares & other travel costs	Rail, air and sea fares. Bicycles, buses, coaches and taxis.	
Leisure goods	TVs, computers, music, films, books, newspapers and magazines. Toys, games and sports goods. Gardening supplies and tools.	
Leisure services	Entertainment and sport subscriptions, exercise classes, cinema, theatre etc. Holidays (both within and outside the Channel Islands) including catered and self-catering accommodation.	

Calculation of the RPIs involves calculating nearly 600 individual item indices based on the average changes in prices of around 2,000 goods and services. The changes are weighted and used to update 14 group indices and the overall index.

Table 2.3.1 provides a summary of the goods and services included within each of the 14 groups of the (all items) RPI.

The RPIX excludes mortgage interest payments (from within the Housing group).

The RPICT excludes mortgage interest payments (from within the Housing group) and also changes in indirect taxes (from within the Alcoholic drink, Tobacco and Motoring expenditure groups).

The RPIY excludes mortgage interest payments (from within the Housing group) and also indirect taxes (from within the Alcoholic drink, Tobacco and Motoring expenditure groups).

For more information on how the indices are aggregated and the weights applied (and how these have changed over time), see the **Guide to the Guernsey Price Inflation Indices** that can be downloaded from https://gov.gg/rpi.

Figure 2.3.1 shows the percentage change in each of the 14 groups of goods and services within each of the RPIs over the year ending December 2023. **Figure 2.3.2** shows the number of percentage points contributed by each group to the annual change in the overall indices over the same time period.

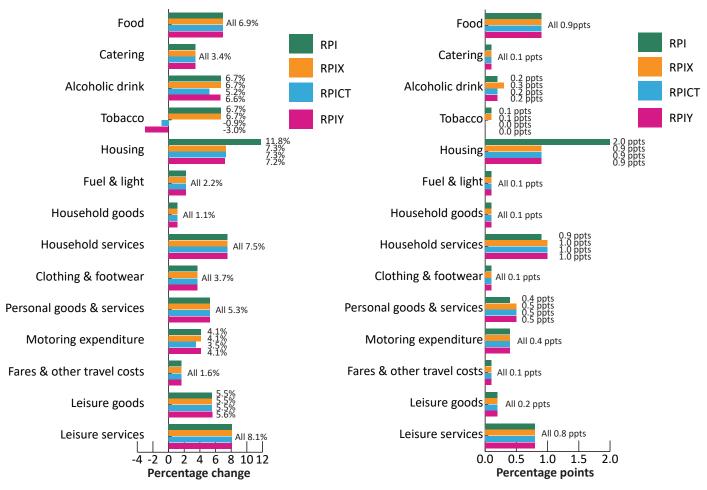
Only the Housing group can show a different annual percentage change between the RPIX and RPI (as a result of the exclusion of mortgage interest payments from that group in the RPIX), whereas the Housing, Alcoholic drink, Tobacco and Motoring expenditure groups can all show a different annual percentage change between the RPICT, the RPIY and the RPI (as a result of the exclusion of mortgage interest payments from the RPICT and the RPIY and different treatment of indirect taxes in each).

Due to differences in the weightings applied to the goods and services within each group, the contribution made by each group to the overall percentage change in the index can differ between the RPI, RPIX, RPICT and RPIY.

In the year ending December 2023, all of the fourteen RPI groups saw an annual increase. The Housing expenditure group saw the largest annual increase at 11.8%, contributing 2.0ppts to the overall percentage change in the RPI, and 0.9ppts to RPIX and RPICT and RPIY.

Figure 2.3.1 Annual percentage change by group (for the year ending in December 2023)

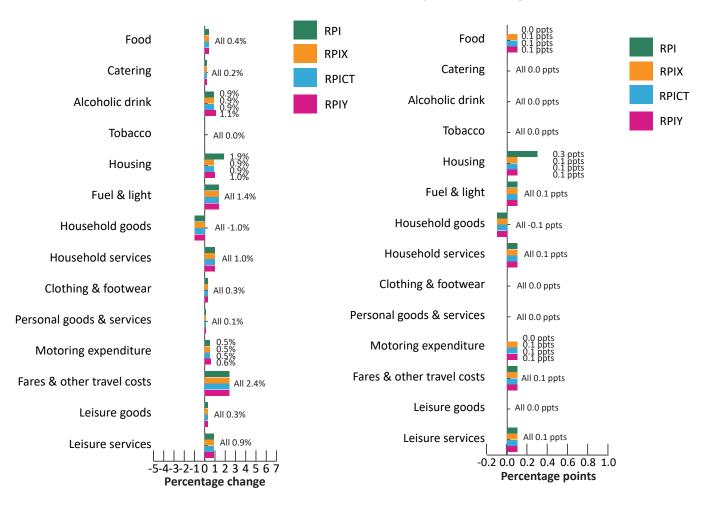
Figure 2.3.2 Contribution of each group to overall annual percentage change in index (for the year ending in December 2023)



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

Figure 2.3.3 Quarterly percentage change by group (for the quarter ending in December 2023)

Figure 2.3.4 Contribution of each group to overall quarterly percentage change in index (for the quarter ending in December 2023)



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

Twelve of the fourteen RPI groups saw a price increase in the three months ending in December 2023 (Figure 3.2.3). One saw a decrease and one remained unchanged.

The largest percentage increase (2.4%) came from the Fares and other travel group, making a contribution of 0.1ppts to the quarterly changes (Figure 3.2.4).

It should be noted that prices of some items are seasonal and, as a result, some groups (particularly Fares and other travel costs and Leisure services) are also impacted by seasonality. The annual changes shown on **page 8** may more clearly show the trends in these groups.

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

The Food group increased by 0.4% for all the RPIs during the latest quarter

Various prices increased this quarter, including for items such as margarine, honey and some fruits. There were also some price reductions, including for some vegetables, fruit drinks and some meats.

The Catering group increased by 0.2% for all the RPIs during the latest quarter

There were increases in the prices of some cafe drinks and take-away snacks.

The Alcoholic drink group increased by 0.9% for RPI, RPIX and RPICT, and by 1.1% for the RPIY during the latest quarter

There were increases in the prices of fortified wine and cider bought in store, and reductions in some spirits bought in store.

The Tobacco group remained unchanged during the latest quarter

Thee were no price changes in this group during this quarter.

The Housing group increased by 1.9% for the RPI, by 0.9% for the RPIX and the RPICT, and by 1.0% for the RPIY during the latest quarter

The mortgage interest payment item is excluded from the RPIX, RPICT and RPIY calculations but is included in the RPI calculations. The mortgage interest payment 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, RPICT and RPIY Housing group increase. There were also increases in some DIY items and dwelling insurance premiums.

The Fuel and light group increased by 1.4% for all the RPIs during the latest quarter

Increases in the cost of kerosene was the main driver of this quarter's increase, along with smaller increases in the price of smokeless fuel.

The Household goods group decreased by 1.0% for all the RPIs during the latest quarter

This quarter, the prices of a variety of items increased, including some household cleaning products, batteries and sticky tape. These increases were partly countered by average price reductions in other items, including gas cookers and home office furniture.

The Household services group increased by 1.0% for all the RPIs during the latest quarter

Prices of pet insurance, cleaner fees, playgroup fees and some telephone charges were amongst the items which increased this quarter.

The Clothing and footwear group increased by 0.3% for all the RPIs during the latest quarter

The prices of many items in this group are volatile, with regular sales and special offers. This quarter, there were price increases in the average cost of several items, including base layers, cardigans and tracksuits, with reductions in the prices of replica football shirts, men's shirts and children's tops.

The Personal goods and services group increased by 0.1% for all the RPIs during the latest quarter

This quarter there were increases in the prices of electric toothbrushes, cosmetics and hairdressing charges, with reductions in the prices of some toiletries, picture frames and handbags.

The Motoring expenditure group increased by 0.5% for the RPI, RPIX and RPICT, and by 0.6% for the RPIY during the latest quarter

This quarter there were increases in the prices of car servicing and vehicle insurance, with special offers in roadside recovery service subscriptions and second hand cars .

The Fares and other travel group increased by 2.4% for all the RPIs during the latest quarter

This quarter there were increases in air fares, car park charges, taxi fares and bus fares. Hire car charges and sea fares decreased during the quarter.

The Leisure goods group increased by 0.3% for all the RPIs during the latest quarter

This quarter there were increases in the prices of CDs, computer game consoles and cameras. There were reductions in the prices of sleeping bags, personal MP4 players and jigsaw puzzles.

The Leisure services group increased by 0.9% for all the RPIs during the latest quarter

There were increases in the prices of leisure evening classes, holiday insurance and digital TV subscriptions, as well as reductions in the prices of holidays within the Channel Islands.

2.4 RPIs - cumulative changes and reflation factors

Table 2.4.1 RPI cumulative changes and reflation factors

		Cumulative % change	Reflation factor
2013	Dec	35.1	1.35
2014	Mar	33.5	1.33
2014	Jun	33.3	1.33
2014	Sep	32.5	1.32
2014	Dec	33.5	1.34
2015	Mar	31.8	1.32
2015	Jun	30.7	1.31
2015	Sep	31.6	1.32
2015	Dec	32.0	1.32
2016	Mar	31.2	1.31
2016	Jun	30.1	1.30
2016	Sep	30.4	1.30
2016	Dec	30.5	1.31
2017	Mar	28.1	1.28
2017	Jun	27.2	1.27
2017	Sep	27.8	1.28
2017	Dec	27.5	1.27
2018	Mar	25.5	1.26
2018	Jun	24.0	1.24
2018	Sep	24.2	1.24
2018	Dec	24.5	1.25
2019	Mar	23.0	1.23
2019	Jun	21.7	1.22
2019	Sep	21.8	1.22
2019	Dec	21.7	1.22
2020	Mar	20.5	1.21
2020	Jun	19.6	1.20
2020	Sep	20.1	1.20
2020	Dec	20.5	1.20
2021	Mar	18.7	1.19
2021	Jun	17.0	1.17
2021	Sep	16.4	1.16
2021	Dec	15.4	1.15
2022	Mar	12.4	1.12
2022	Jun	9.6	1.10
2022	Sep	7.9	1.08
2022	Dec	6.3	1.06
2023	Mar	3.8	1.04
2023	Jun	2.1	1.02
2023	Sep	0.8	1.01
2023	Dec	0.0	1.00

The headline annual inflation rate is the percentage change in the index over a year. It is, however, 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 2.4.1** and **2.4.2** 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 RPI reflation factors, £100 in December 2018 is equivalent to £100 x 1.25 = £125 in December 2023.

Reflation factors can also be used in the opposite way. To calculate what £100 in December 2023 would have been worth in December 2018, divide by the relevant reflation factor. In this example, using RPI reflation factors, the calculation would be £100 / 1.25 = £80.00.

The **Supplementary and historical inflation data** spreadsheet on the website contains reflation factors from 1949 (for RPI) and from 1999 (for RPIX).

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.

2.4 RPIs - cumulative changes and reflation factors

Table 2.4.2 RPIX cumulative changes and reflation factors

		Cumulative % change	Reflation factor
2013	Dec	34.8	1.35
2014	Mar	33.3	1.33
2014	Jun	33.2	1.33
2014	Sep	32.7	1.33
2014	Dec	34.0	1.34
2015	Mar	32.2	1.32
2015	Jun	31.3	1.31
2015	Sep	32.1	1.32
2015	Dec	32.6	1.33
2016	Mar	31.6	1.32
2016	Jun	30.5	1.30
2016	Sep	30.6	1.31
2016	Dec	30.5	1.31
2017	Mar	27.9	1.28
2017	Jun	26.9	1.27
2017	Sep	27.6	1.28
2017	Dec	27.4	1.27
2018	Mar	25.5	1.26
2018	Jun	23.9	1.24
2018	Sep	24.2	1.24
2018	Dec	24.6	1.25
2019	Mar	23.0	1.23
2019	Jun	21.7	1.22
2019	Sep	21.7	1.22
2019	Dec	21.6	1.22
2020	Mar	20.0	1.20
2020	Jun	18.8	1.19
2020	Sep	19.3	1.19
2020	Dec	19.7	1.20
2021	Mar	18.0	1.18
2021	Jun	16.1	1.16
2021	Sep	15.5	1.16
2021	Dec	14.5	1.14
2022	Mar	11.4	1.11
2022	Jun	8.6	1.09
2022	Sep	7.0	1.07
2022	Dec	5.5	1.05
2023	Mar	3.1	1.03
2023	Jun	1.7	1.02
2023	Sep	0.6	1.01
2023	Dec	0.0	1.00

The headline annual inflation rate is the percentage change in the index over a year. It is, however, 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 RPIX between any two quarters from 1999 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 2.4.1** and **2.4.2** 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 2018 is equivalent to £100 x 1.25 = £125 in December 2023.

Reflation factors can also be used in the opposite way. To calculate what £100 in December 2023 would have been worth in December 2018, divide by the relevant reflation factor. In this example, using RPIX reflation factors, the calculation would be £100 / 1.25 = £80.00.

The **Supplementary and historical inflation data** spreadsheet at **www.gov.gg/rpi** contains reflation factors from 1949 (for RPI) and from 1999 (for RPIX).

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.

Table 3.1.1 Annual percentage change in each of the HCIs (for the year ending in December 2023)

	Annual %
	change
Low income households	5.9
High income households	6.2
Households with one or more child(ren)	6.7
Households with no children	6.4
Households with one or more retired person(s)	5.7
Households with no retired persons	6.5
Households with one or more disabled person(s)	6.0
Households with no disabled persons	6.2
Owner occupier households without mortgages	5.6
Owner occupier households with mortgages	7.5
Private renter households	5.1
Social renter and partial owner households	7.6
All households - overall average	6.3

NB: A definition of each index (e.g. what is meant by high income vs. low income) is provided in the **Guide to the Guernsey Price Inflation Indices**, which is available online at https://gov.gg/rpi.
It should be noted that households can feature in more than one of the HCIs listed above, but not in both of the indices presented paired alongside each other nor in more than one of the groups of the four tenure-related indices.

To aid understanding of how inflation is impacting on different households, thirteen HCIs were established (at base 100) in September 2021 and have been updated each quarter since then.

They use a method of weighting that gives each household equal representation, that differs to the RPIs, which intentionally give higher spenders a higher representation (and is appropriate for measures that are intended to show the average inflation across all goods and services bought by all households, but is not favoured for measures intended to aid understanding of how inflation is impacting on smaller groups of households). They use the Jevons method for working out average price changes, which is supposed to best model consumer habits when faced with price changes (and so are not susceptible to the formula effect). All the HCIs are based on the same shopping basket as each other and the RPIs and include mortgage interest payments and indirect taxes. The only difference between each of the HCIs is the weights used. They are designed to be compared with each other, but not with the RPIs.

Table 3.1.1 shows the annual percentage change in each of the HCIs for the year ending December 2023.

Over the next pages, these percentage changes are further broken down into two categories: staple goods and services and additional goods and services, as described below. In practice, each individual household will consider different goods and services to be staple (essential) and others to be additional to that.

Table 3.1.2: HCI categories

Category	Goods and Services Included		
Staple	Essential goods and services, where the consumer has little choice regardless of price and income pressures.		
goods &	Such as: basic foods and non-alcoholic drinks, housing, utilities, phone and computer connectivity, postage,		
services	child minders, clothes and shoes, licences and fees for financial services.		
Additional	Goods and services where the consumer exercises some degree of choice over whether or not to buy and		
goods &	how much they spend (the price and amount purchased). Such as: biscuits, cakes, sweets, restaurant and		
services	take-away foods and drinks, alcoholic drinks, cigarettes, home furnishings, cleaners, gardeners, clothing		
	accessories, vehicle purchases, air and sea fares, toys, games, books, exercise classes, sports, entertainment,		
	DIY and gardening tools and materials, private and higher education.		

Figure 3.1.1 Annual percentage change in each of the HCIs (for the year ending in December 2023), showing contributions from staple and additional goods and services

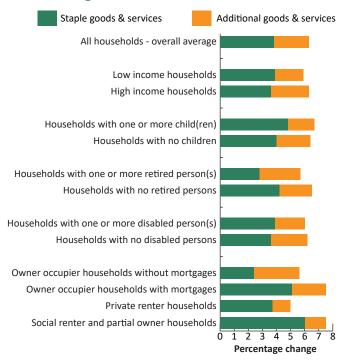
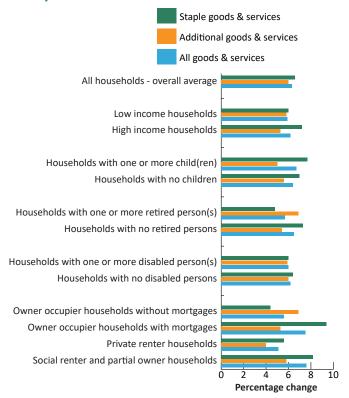


Figure 3.1.2 Annual percentage change in staple, additional and all goods and services for each HCI (for the year ending in December 2023)



The categorisation of goods and services as either staple or additional is intended to aid understanding of inflationary pressures being experienced by different household types. A summary of the items under each heading is provided on page 14.

Figure 3.1.1 displays the contribution to each HCI annual change from staple goods and services and from additional goods and services over the year ending in December 2023. **Figure 3.1.2** shows the annual percentage change (over the year ending in December 2023) in staple goods and services, additional goods and services and all goods and services for each HCI.

The HCIs increased by between 5.1% and 7.6% over the year ending in December 2023; the biggest range was seen in the indices for households with different housing tenures.

The index for Social renter and partial owner households was the HCI with the highest overall increase at 7.6% (1.3 percentage points above the increase in the overall average HCI). Staple goods and services increased by 8.2% on average for Social renter and partial owner households and contributed 6.0 percentage points to the 7.6% increase in their index. Additional goods and services increased by 5.8% on average and contributed 1.5 percentage points.

The index for Private renter households was the HCI with the lowest overall increase at 5.1% (1.2 percentage points below the increase in the overall average HCI). Staple goods and services increased by 5.6% on average for Private renter households and contributed 3.7 percentage points to the 5.1% increase in their index. Additional goods and services increased by 4.0% on average and contributed 1.3 percentage points.

More detailed data tables are provided in the supplementary spreadsheet, which can be downloaded from https://gov.gg/rpi.

4.1 Methodology

The calculations of the RPIs and HCIs 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 calculations contains over 1,700 items. The goods and services included in calculations are kept the same from one quarter to the next, in order to accurately assess price inflation (rather than changes in basket contents) each quarter.

The price change for each item is weighted and then combined to give the overall change in the index. Different indices use different weights and the RPIX, RPICT and RPIY all exclude the mortgage interest payment item, which is one of the items in the basket.

Periodically, new items are added to the basket and other items are removed and the weights are updated. Also, the main source of information for these updates is the Household Expenditure Survey. The results of the 2018-19 survey are available from https://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).

The methodology is continuously monitored and is occasionally audited and updated to ensure it remains accurate and representative.

The **Guide to the Guernsey Price Inflation Indices**, which is available online from **https://gov.gg/rpi**, provides more detail regarding the weights, methodology, calculation and uses of the inflation indices.

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. Fewer prices than normal could be collected when social distancing measures were in place in 2020 and 2021. Eurostat guidance on how to maintain the indices in these circumstances was followed. 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).

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 up to and including December 2021.

4.1 Methodology

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 2018-2019 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.

4.2 Contact details

For more information on how the inflation indices are calculated, please see the **Guide to the Guernsey Price Inflation Indices**, which, along with the Inflation Calculator, is available via **https://gov.gg/rpi**. The inflation hotline telephone number is 01481 227012.

The next inflation bulletin (for March 2024) will be published at 9:30am on Tuesday 23rd April 2024 (provisional date).

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

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For more information go to gov.gg/data