

Statistical bulletin

# Household Costs Indices, UK: third preliminary estimates, 2005 to 2019

UK households' experience of changing prices and costs. These are the third preliminary estimates for 2005 to 2019 of the Household Costs Indices, a set of measures which are currently in development.

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# 1 . Main points

- Retired households have experienced higher costs growth than non-retired households since May 2017; this has been driven mainly by electricity and council tax.
- High income households have experienced higher costs growth than low income households in recent years due to transport, hotels, restaurants and package holidays.
- Owner-occupied households have had higher costs growth than either private or subsidised renters since April 2017, driven mainly by council tax and package holidays.
- Rising electricity prices have caused costs to grow faster for disabled households than non-disabled households since April 2017.

## 2 . Summary

Table 1 presents an overview of annual growth rates for selected household groups. Growth rates in 2019 have been lower than their long-term averages for all groups. The gaps between growth rates within subgroups are also smaller. For example, the difference between the long-term average growth rates for retired and non-retired households is 0.5 percentage points, while in 2019 it was only 0.3.

In the case of households differentiated by income level or tenure type, the historic trend reversed in 2019. Low income households have generally experienced higher growth rates than high income households since 2005 but saw lower growth in 2019. Subsidised renters have historically experienced higher growth rates than either private renters or owner-occupiers but saw lower growth in 2019.

Table 1: Mean HCIs 12-month growth rates for selected household groups, UK, 2006 to 2018 and 2019

Household Group	Mean 12 Month Growth Rate 2006-2018 (%)	Mean 12 Month Growth Rate 2019 (%)
<b>Retired</b>		
Retired	2.8	2.2
Non-retired	2.3	1.9
<b>Income</b>		
Low income	2.7	1.9
High income	2.3	2.0
<b>Tenure type</b>		
Subsidised rent	2.8	1.6
Private rent	2.3	1.8
Owner occupied	2.4	2.1
<b>Disabled<sup>3</sup></b>		
Disabled	1.9	2
Non-disabled	2	1.9
<b>All households</b>	2.5	2

Source: Office for National Statistics - Household Costs Indices

#### Notes

1. The average presented is the compound average 12-month growth rate of the unrounded indices. Consequently, it may differ from the arithmetic average of the 12-month growth rates presented in this article. [Back to table](#)
2. The all-households index is calculated as a separate index and not as an average of the income deciles. [Back to table](#)
3. The growth rate series for disabled and non-disabled households begins in 2016. [Back to table](#)
4. Low-income households are those within the second income decile, and high-income households are those within the ninth income decile [Back to table](#)

We have chosen to exclude the analysis of households with and without children in this year's Household Costs Indices (HCIs) results paper, due to its similarity to other subgroups. The expenditure patterns, annual growth rates and contributions results for households with and without children are still available within the data tables released alongside this article.

If you would like to provide feedback on the choice of household groups presented, please send comments by email to [cpi@ons.gov.uk](mailto:cpi@ons.gov.uk).

We present changes in prices and costs for household groups alongside measures of mean equivalised disposable income, as produced within the [Average household income](#) publication. The annual figures presented are nominal, meaning that they do not adjust for changes in prices and costs. When comparing the HCIs with income, the indices have been re-referenced to the financial year ending (FYE) 2006, and an annual average of each index value is used. How well off a household group is will depend on the levels of average income and costs in the base period FYE 2006. The limitations of the income comparisons are discussed in [Section 10](#).

In the following sections we present more detailed results for each of the subgroups considered. We assume that each household group experiences the same price changes; therefore, any differences in price index between two household groups arises from differences in their distribution of expenditure. The reasons for this and its implications are discussed in [Section 10](#).

### 3 . Households of Varying tenure types

Table 2 gives a breakdown of how households of each tenure type are distributed across the other subgroups over the fourteen years of the sample.

Table 2: Private renters are relatively unlikely to be retired or disabled  
Household Costs Indices, UK, 2005 to 2019

Subgroup	Subsidised Renters	Private Renters	Owner Occupiers
<b>All data</b>	19%	12%	69%
<b>Of which:</b>			
<b>Retirement Status</b>			
Retired	30%	7%	30%
Non-retired	70%	93%	70%
<b>Income</b>			
% in 2nd Income Decile	19%	10	8%
% in 9th Income Decile	2%	9%	12%
<b>Disability</b>			
Disabled	57%	27%	37%
Non-disabled	43%	73%	63%

Source: Office for National Statistics - Household Costs Indices

#### Notes

1. Totals may not sum to 100% within subgroups due to rounding. [Back to table](#)
2. Low-income households are those within the second income decile, and high-income households are those within the ninth income decile. These two subgroups will not sum to 100% as they only represent 2 of the 10 income deciles. [Back to table](#)

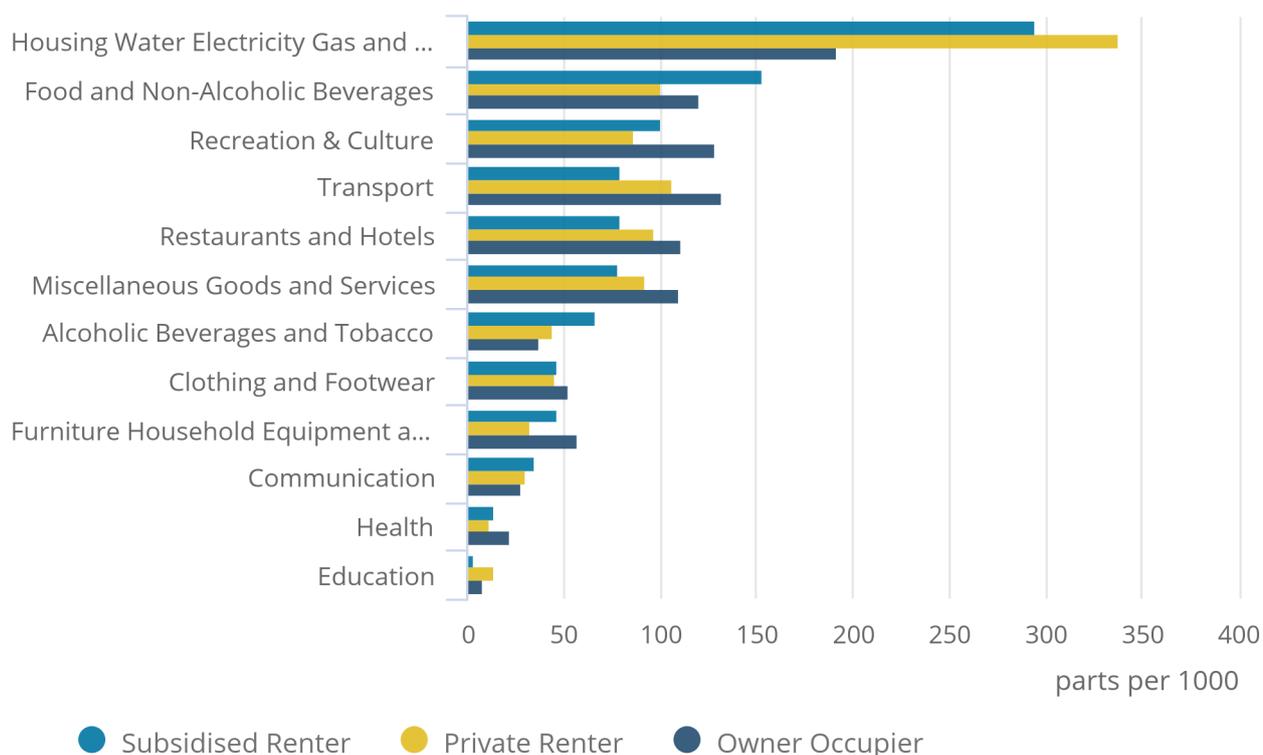
Figure 1 presents the average annual expenditure share on each category of spending for households of each tenure type.

## Figure 1: Both types of renter spend far larger proportions of their expenditure on housing

Household Costs Indices, average expenditure share, UK, 2005 to 2019

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Household Costs Indices, average expenditure share, UK, 2005 to 2019



Source: Office for National Statistics - Household Costs Indices

#### Notes:

1. Expenditure shares may not sum to 1,000 due to rounding.
2. Weights for each category of spending are averaged across the period of 2005 to 2019.

Compared with last year's results, the average expenditure share spent on housing by private renters has fallen from 370 parts per thousand to 338 parts per thousand, while the average expenditure share spent on housing by subsidised renters has risen from 263 parts per thousand to 295 parts per thousand. This has been caused by a methodological change in this year's publication. In previous years, we have used the combined Actual Rents for Housing index component of the Consumer Prices Index (CPI) to cover both rental types. Our analysis has shown that private and subsidised rental prices move independently of each other, so to reflect this behaviour we have treated their prices and expenditure separately in the compilation of the (HCIs). However, to fully separate private and subsidised rents, we have suppressed the application of our proxy methodology that compensates for the low proportion of privately rented households; therefore, the effect may be overstated. Details of the proxy methodology can be found in our article [Investigating the impact of different weighting methods on CPIH](#).

Housing costs for private and subsidised renters still dominate the chart. This affects the rest of the expenditure distribution, in that there are only three other categories where private renters spend a greater share of expenditure than owner-occupiers: education, alcohol and tobacco, and communication, and these differences are small. The picture is similar for subsidised renters, with the exception that they also devote a larger share of expenditure to food and drink than owner-occupiers.

Figure 2 shows how the growth rates for households of each tenure type have evolved over time.

**Figure 2: Owner occupiers have had the highest growth rate since April 2017**

Household Costs Indices, households separated by tenure type, UK, 2005 to 2019

Figure 2: Owner occupiers have had the highest growth rate since April 2017

Household Costs Indices, households separated by tenure type, UK, 2005 to 2019



Source: Office for National Statistics - Household Costs Indices

Owner-occupiers have had the highest growth rate of the three tenure types since April 2017. This is the longest period in our series for which this has been the case. Their growth rate has been higher than subsidised renters since April of 2016. Over the entire series from 2006 to 2019 subsidised renters have had the highest growth rate about half of the time.

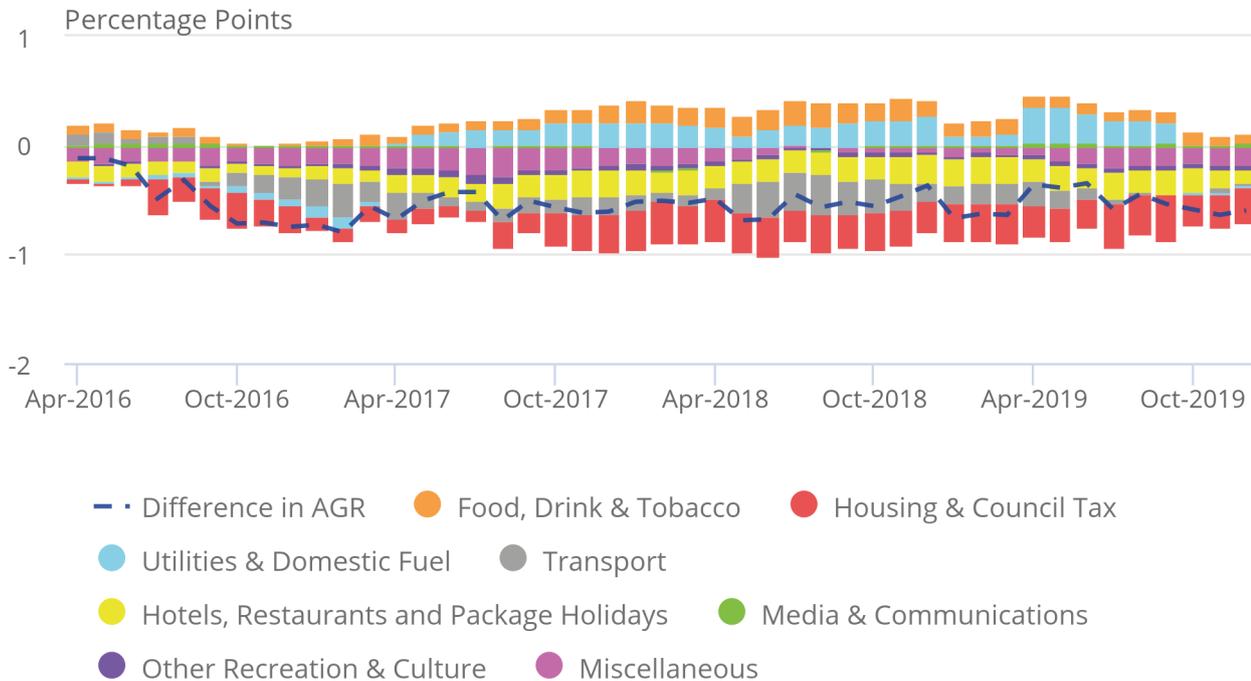
A chart of contributions to growth illustrates which areas of the HCIs basket have been driving this difference. To improve the readability of the charts in this article the expenditure classes have been grouped into fewer groups than the 12 top-level classification of individual consumption by purpose (COICOP) divisions. Contributions data grouped at the COICOP divisional level is available in the dataset that accompanies this release.

**Figure 3: Transport and housing costs have pulled subsidised renters growth rates below owner-occupiers**

Household Costs Indices, households separated by tenure type, UK, 2005 to 2019

Figure 3: Transport and housing costs have pulled subsidised renters growth rates below owner-occupiers

Household Costs Indices, households separated by tenure type, UK, 2005 to 2019



Source: Office for National Statistics - Household Costs Indices

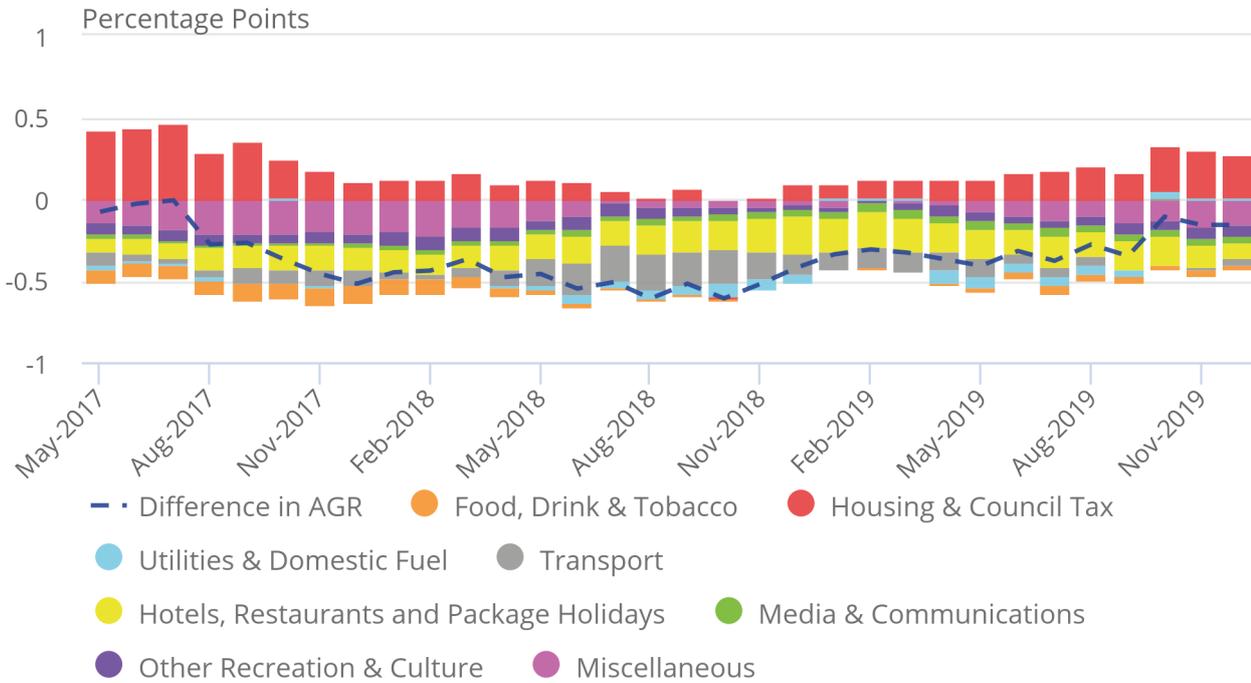
The main drivers of the difference between subsidised renters and owner occupiers have been their respective housing costs (that is, mortgage payments and rents), along with Council Tax and transport fuels and lubricants. Owner-occupied housing costs have risen modestly since 2016, while subsidised rents have fallen. Council tax and transport fuel rose in price between April 2016 and December 2019 by 21% and 19% respectively. Owner-occupiers tend to have larger expenditure shares in these categories, so these increases in price have a stronger effect on their index. Electricity and tobacco have had the largest contributions in the opposite direction.

**Figure 4: Owner occupiers' higher growth rates are partly balanced by renters' housing costs**

Household Costs Indices, households separated by tenure type, UK, 2005 to 2019

Figure 4: Owner occupiers' higher growth rates are partly balanced by renters' housing costs

Household Costs Indices, households separated by tenure type, UK, 2005 to 2019



Source: Office for National Statistics - Household Costs Indices

Besides housing costs and council tax, the largest individual contribution to difference between private renters and owner occupiers between April 2017 and December 2019 is, on average, from package holidays. Prices have risen 13% over this period, but the difference in expenditure shares between private renters and owner occupiers has widened by 60%, with owner occupiers spending more. This magnifies the effect of the price change on the difference in growth rates.

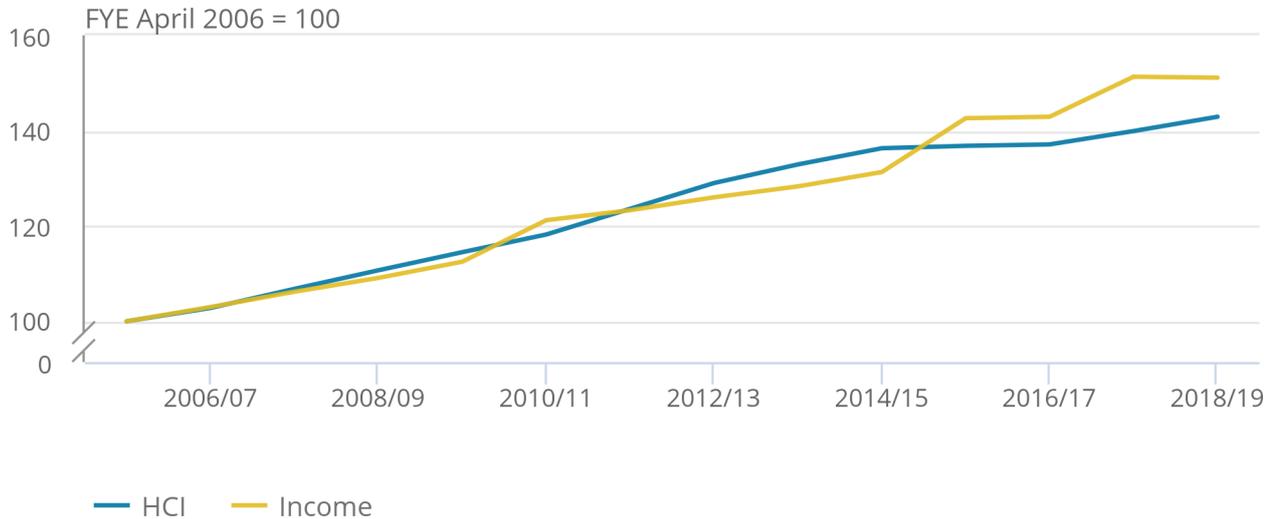
The cumulative income growth is compared with the cumulative HCIs growth in Figures 5, 6 and 7 for households of each tenure type. All three categories have experienced faster income growth than costs growth in recent years, but by different amounts. The spike in private renters' incomes between 2007 and 2008 is an artefact of the Survey of Personal Incomes (SPI) adjustment, discussed in more detail in [Section 10](#).

**Figure 5: Subsidised renters costs and incomes have risen fastest of the three tenure types**

Mean equivalised household disposable income (nominal) and Household Costs Indices cumulative growth, UK, financial years ending 2006 to 2019

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Mean equivalised household disposable income (nominal) and Household Costs Indices cumulative growth, UK, financial years ending 2006 to 2019



Source: Office for National Statistics - Household Costs Indices

Notes:

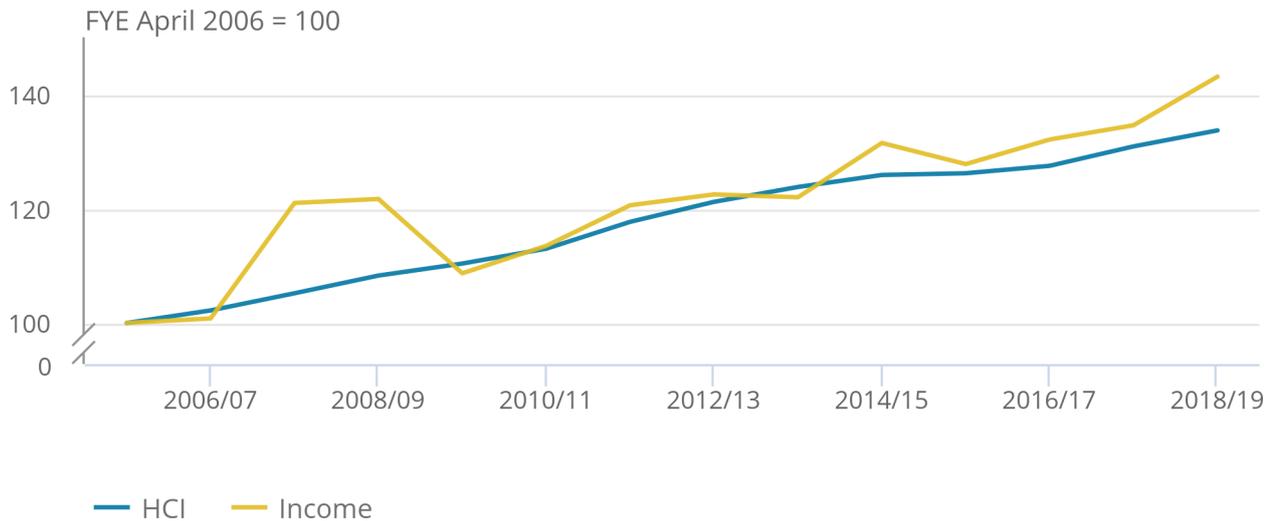
1. See Section 10 for a discussion of the income measure.

## Figure 6: Income has been rising faster than costs for private renters since 2014

Mean equivalised household disposable income (nominal) and Household Costs Indices cumulative growth, UK, financial years ending 2006 to 2019

### Figure 6: Income has been rising faster than costs for private renters since 2014

Mean equivalised household disposable income (nominal) and Household Costs Indices cumulative growth, UK, financial years ending 2006 to 2019



Source: Office for National Statistics - Household Costs Indices

#### Notes:

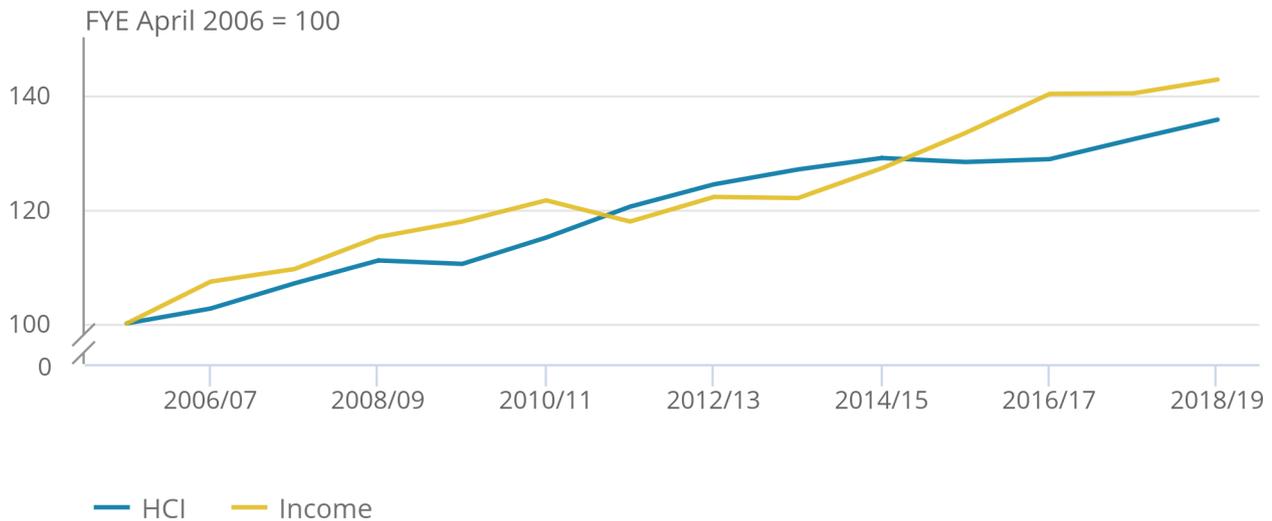
1. See Section 10 for a discussion of the income measure.

**Figure 7: The smallest gap between cost and growth increases since 2005 is among owner-occupiers**

Mean equivalised household disposable income (nominal) and Household Costs Indices cumulative growth, UK, financial years ending 2006 to 2019

Figure 7: The smallest gap between cost and growth increases since 2005 is among owner-occupiers

Mean equivalised household disposable income (nominal) and Household Costs Indices cumulative growth, UK, financial years ending 2006 to 2019



Source: Office for National Statistics - Household Costs Indices

Notes:

1. See Section 10 for a discussion of the income measure.

Between 2005 and 2019, subsidised renters have seen a 51% increase in their incomes from a financial year ending (FYE) 2006 base of £15,424 alongside a 43% increase in their costs. Private renters' incomes have grown by 43% from a base of £22,202 compared with a 34% increase in costs. Owner-occupiers' incomes have grown by 43% from a base of £29,058 against cost increases of 36%.

## 4 . Retired and non-retired households

Table 3: Retired households have lower incomes and are more likely to be disabled than non-retired households  
Office for National Statistics - Household Costs Indices

Subgroup	Retired Households	Non-retired households
<b>All households</b>	28%	72%
<b>Of which:</b>		
<b>Income</b>		
% in 2nd income decile	15%	8%
% in 9th income decile	4%	12%
<b>Tenure type</b>		
Subsidised rented	21%	18%
Private rented	4%	18%
Owner occupied	75%	64%
<b>Disability</b>		
Disabled	57%	32%
Non-disabled	43%	68%

### Notes

1. Totals may not sum to 100% within subgroups due to rounding. [Back to table](#)
2. Low-income households are those within the second income decile, and high-income households are those within the ninth income decile. These two subgroups will not sum to 100% as they only represent two of the ten income deciles. [Back to table](#)

Of those retired households that live in owner-occupied accommodation, 94% are not making mortgage repayments.

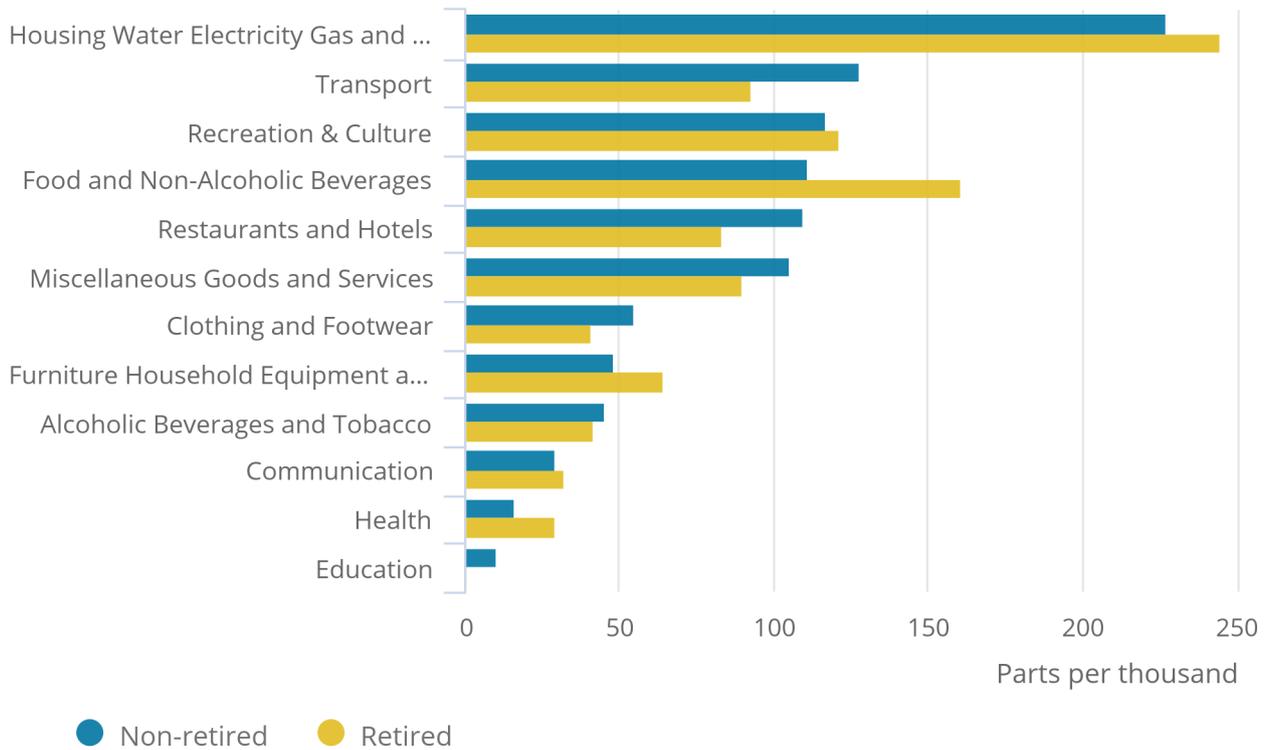
Figure 8 presents the average annual expenditure share on each category of spending for retired and non-retired households.

**Figure 8: Housing has the largest share of expenditure for both retired and non-retired households**

Household Costs Indices, average expenditure share, UK, 2005 to 2019

Figure 8: Housing has the largest share of expenditure for both retired and non-retired households

Household Costs Indices, average expenditure share, UK, 2005 to 2019



Source: Office for National Statistics - Household Costs Indices

Notes:

1. Expenditure shares may not sum to 1000 due to rounding.
2. Weights for each category of spending are averaged across the period of 2005 to 2019.

Housing costs are clearly the largest expenditure category for both retired and non-retired households. While many retired households are either in subsidised rented accommodation or in owner-occupied housing with no outstanding mortgage, the combined effects of Council Tax and utility bills almost offset this in expenditure share terms, as illustrated in Table 4. These items are relatively fixed costs, and the potentially lower incomes of retired households could mean that they account for a larger share of their expenditure.

Table 4: Differences in expenditure shares devoted to Council Tax, gas and electricity almost offset owner-occupied housing and private rents for retired households.

Expenditure Category	Difference in Expenditure Share, Retired less Non-retired, parts/1000
Council Tax	20.5
Gas	17
Electricity	14.4
Owner Occupied Housing	-25.6
Private Rents	-35.2

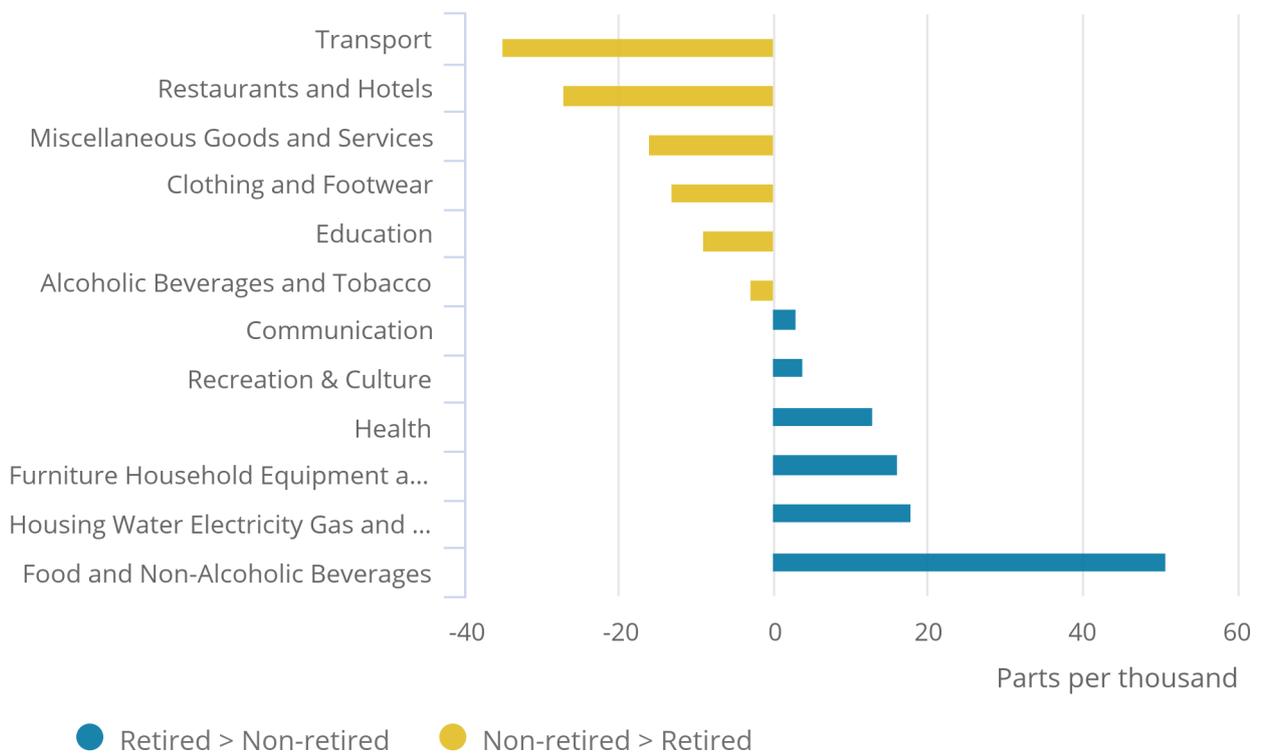
Source: Office for National Statistics - Household Costs Indices

Figure 9: The largest difference in expenditure shares between retired and non-retired households is in food

Household Costs Indices, retired and non-retired households, UK, 2005 to 2019

Figure 9: The largest difference in expenditure shares between retired and non-retired households is in food

Household Costs Indices, retired and non-retired households, UK, 2005 to 2019



Source: Office for National Statistics - Household Costs Indices

There are six divisions in the Household Costs Indices (HCIs) basket where retired households' expenditure shares are larger than those for non-retired households. The largest such difference is in food and drink. By contrast, the largest difference in the opposite direction (non-retired households greater than retired) is in restaurants and accommodation. We expect that non-retired households will have more of their meals away from home, increasing their expenditure in restaurants and cafeterias and reducing the amount of food bought for home consumption.

Non-retired households have larger expenditure shares in all classes within Transport except for maintenance and repairs. This may be explained partly by the increased requirement for travel to work, and partly by retired households' preference for package holidays over booking separate flights and accommodation. Air travel booked in isolation is recorded under Transport, while a package holiday is recorded under Recreation and culture.

Figure 10 shows how the growth rates for retired and non-retired households have evolved over time.

**Figure 10: Retired households have experienced a higher rate of inflation than non-retired households since May 2017**

Household Costs Indices, retired and non-retired households, UK, 2005 to 2019

Figure 10: Retired households have experienced a higher rate of inflation than non-retired households since May 2017

Household Costs Indices, retired and non-retired households, UK, 2005 to 2019



Source: Office for National Statistics - Household Costs Indices

Growth rates for retired and non-retired households have been relatively similar since 2010. During this period the difference between their growth rates was half a percentage point or less, 95% of the time. The growth rate for retired households was higher two-thirds of the time. The cumulative effect of this is that the Household Cost Index (HCI) for retired households has increased by an extra 1.4 percentage points above that for non-retired households since 2010.

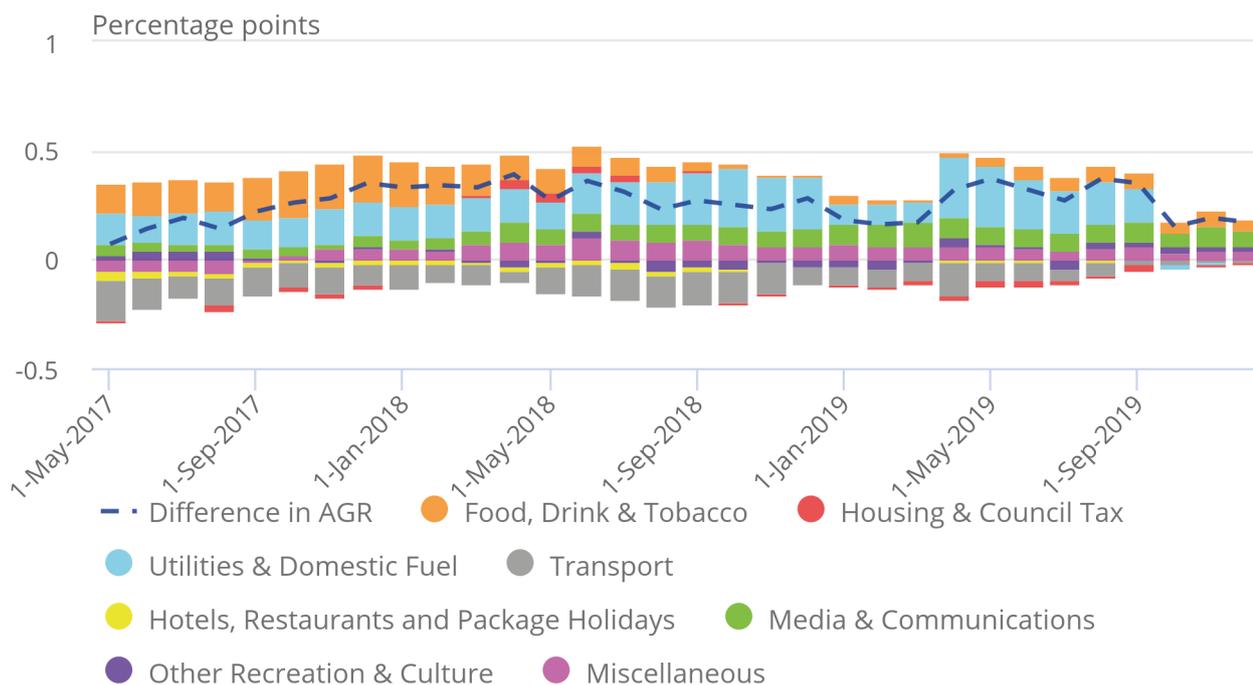
Growth rates for retired households are currently higher than for non-retired households, a situation that has been in place since May 2017. A chart of contributions to differences in growth illustrates which areas of the HCIs basket have been driving this.

**Figure 11: Utilities have been the main contributor to higher growth rates for retired households**

Household Costs Indices, retired and non-retired households, UK, 2005 to 2019

Figure 11: Utilities have been the main contributor to higher growth rates for retired households

Household Costs Indices, retired and non-retired households, UK, 2005 to 2019



Source: Office for National Statistics - Household Costs Indices

The largest drivers of this difference have been electricity, and council tax. Retired households have larger expenditure shares devoted to these outgoings than non-retired households, and both have seen price increases since May 2017 (16.5%, and 10% respectively). However, the counterbalancing contributions from private rents and owner-occupied housing mean that the overall contributions from the housing category roughly cancel out. Elsewhere, there is a large upward contribution from newspapers and periodicals and a large downward contribution from restaurants and cafes.

Table 5: Expenditure shares and contributions to difference in 12-month growth rates for selected categories of spending, retired and non-retired households

Expenditure Category	Mean expenditure share, parts/1000 2017-2019		Mean contribution to difference in AGR May 2017 – Dec 2019 (pp) <sup>1</sup>
	Retired	Non-retired	
Electricity	32	21.4	0.09
Council Tax	51.2	32.6	0.08
Newspapers and Periodicals	13.8	3	0.06
Owner Occupied Housing	29.8	44.8	-0.03
Restaurants and Cafes	67.5	77.7	-0.03
Private Rentals	10.5	63.9	-0.06

Source: Office for National Statistics - Household Costs Indices

#### Notes

1. Mean difference in growth rates over the same period was 0.3 percentage points. [Back to table](#)

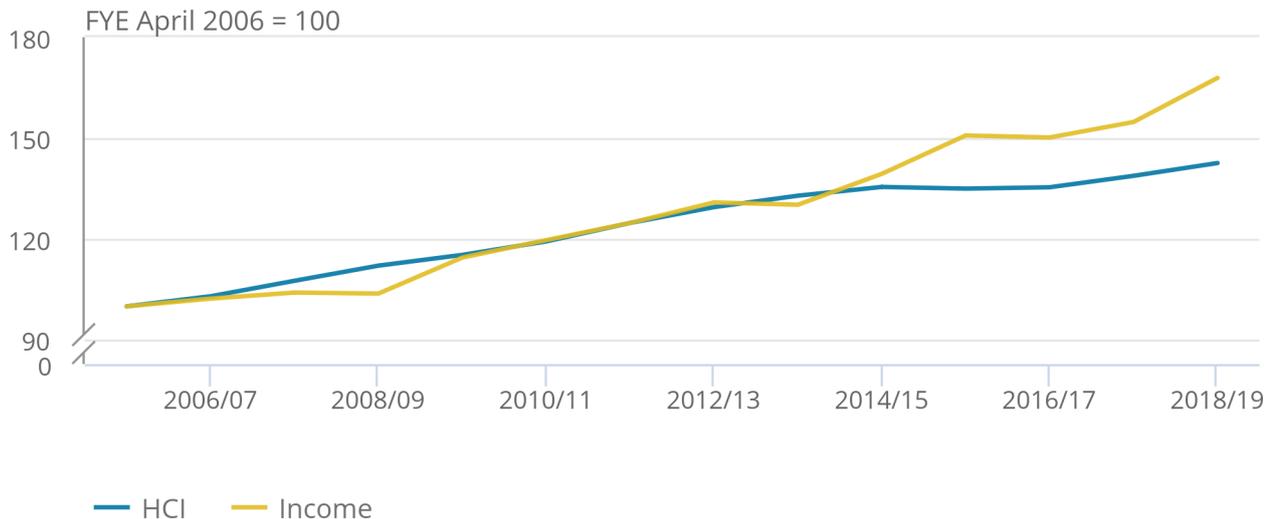
While prices for retired households have grown faster than those of non-retired households, their income growth has outpaced that of non-retired households by a greater margin. Figure 12 shows a comparison of the HCI with average incomes for retired households.

**Figure 12: Income growth for retired households has rapidly outpaced cost increases in recent years.**

Mean equivalised household disposable income (nominal) and Household Costs Indices cumulative growth, UK, financial years ending 2006 to 2019

Figure 12: Income growth for retired households has rapidly outpaced cost increases in recent years.

Mean equivalised household disposable income (nominal) and Household Costs Indices cumulative growth, UK, financial years ending 2006 to 2019



Source: Office for National Statistics - Household Costs Indices

Notes:

1. See Section 10 for a discussion of the income measure.

Household income for retired households increased by 68% between financial year ending (FYE) 2006 and FYE 2019, from a base of £17,931; however, household costs for retired households only increased by 43% over this same period. This divergence began in 2014, and our research suggests that [private pensions are the main reason for the rising disposable income of retired households](#).

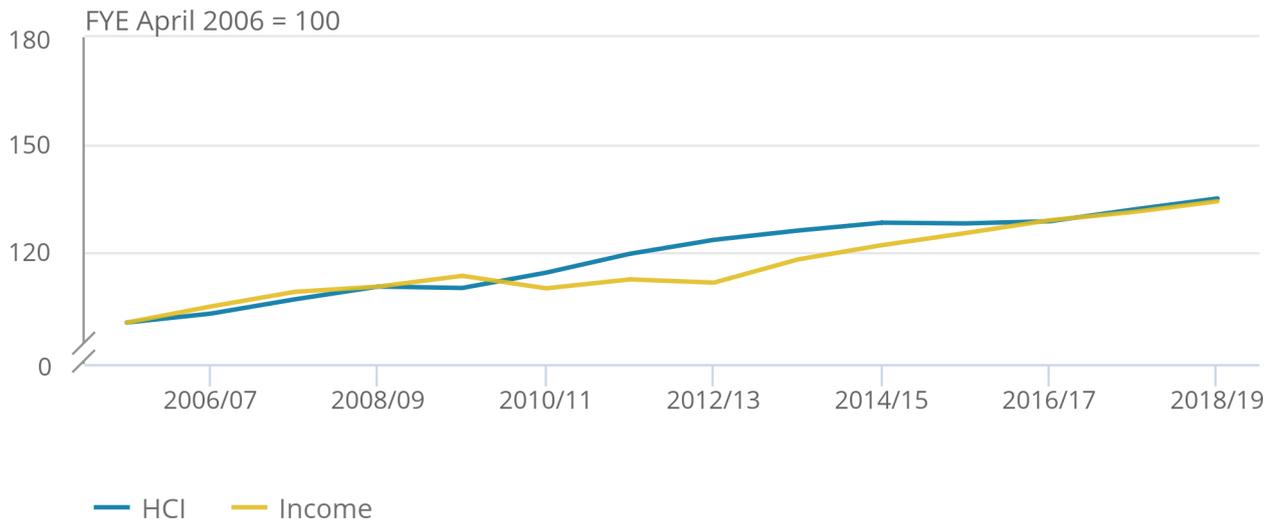
Non-retired households have not seen such a rapid increase in incomes from their FYE 2006 base of £28,512, however the large gap between cost and income growth seen between 2010 and 2016 has closed.

### Figure 13: Incomes for non-retired households have risen broadly in line with costs

Mean equivalised household disposable income (nominal) and Household Costs Indices cumulative growth, UK, financial years ending 2006 to 2019

### Figure 13: Incomes for non-retired households have risen broadly in line with costs

Mean equivalised household disposable income (nominal) and Household Costs Indices cumulative growth, UK, financial years ending 2006 to 2019



Source: Office for National Statistics

Notes:

1. See Section 10 for a discussion of the income measure.

## 5 . Low and high income households

Table 6 shows a breakdown of how low- and high-income households are distributed across the household subgroups over the fourteen years of the sample.

Table 6: Low-income households are more likely to be non-retired and live within an owner-occupied dwelling, but have an equal likelihood of being disabled or non-disabled

Subgroup	Low-income households	High-income households
<b>All households</b>	10%	10%
<b>Of which:</b>		
<b>Retirement status</b>		
Non-retired	60%	88%
Retired	40%	12%
<b>Tenure type</b>		
Subsidised rented	35%	4% <sup>3</sup>
Private rented	14%	12%
Owner occupied	51%	84%
<b>Disability</b>		
Disabled	50%	72%
Non-disabled	50%	28%

Source: Office for National Statistics - Household Costs Indices

#### Notes

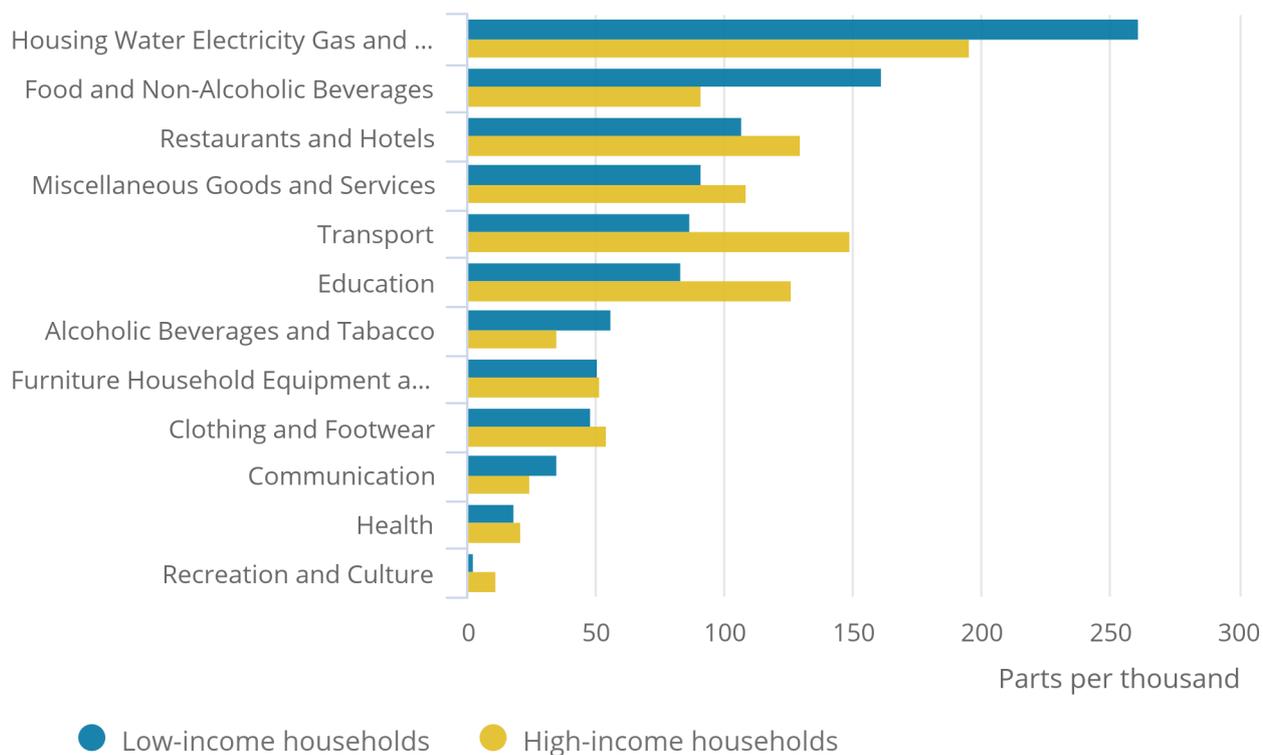
1. Totals may not sum to 100% within subgroups due to rounding [Back to table](#)
2. Low-income households are those within the second income decile, and high-income households are those within the ninth income decile. These two subgroups will not sum to 100% as they only represent two of the ten income deciles. [Back to table](#)
3. Of which Living Costs and Food Survey (LCF) records a very small number of households reporting in this category. See Section 10 for further details. [Back to table](#)

**Figure 14: Housing is the largest share of expenditure for both low- and high-income households**

Household Cost Indices, average expenditure share, UK, 2005 to 2019

**Figure 14: Housing is the largest share of expenditure for both low- and high-income households**

Household Cost Indices, average expenditure share, UK, 2005 to 2019



Source: Office for National Statistics - Household Costs Indices

Notes:

1. Expenditure shares may not sum to 1000 due to rounding.
2. Weights for each category of spending are averaged across the period of 2005 to 2018.
3. Low-income households are those within the second income decile, and high-income households are those within the ninth income decile.

Housing costs are a significant category of expenditure for both low- and high-income households. In addition, Food and non-alcoholic beverages and Recreation and culture are categories that have high expenditure shares for both low- and high-income households.

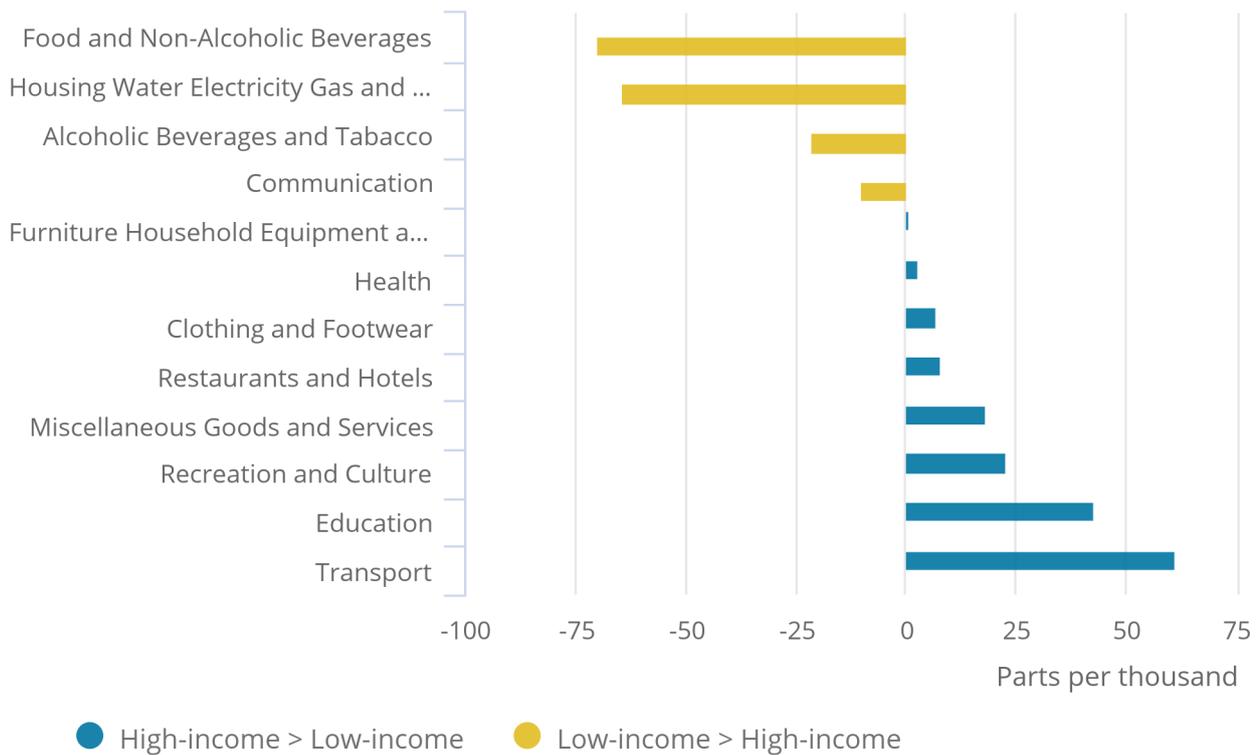
Figure 15 illustrates the differences in expenditure shares by spending category for both low- and high-income households.

**Figure 15: The largest difference in expenditure shares for low- and high-income households is within the food and non-alcoholic beverages division**

Household Cost Indices, low- and high-income households, UK, 2005 to 2019

Figure 15: The largest difference in expenditure shares for low- and high-income households is within the food and non-alcoholic beverages division

Household Cost Indices, low- and high-income households, UK, 2005 to 2019



Source: Office for National Statistics - Household Costs Indices

Notes:

1. Low-income households are those within the second income decile, and high-income households are those within the ninth income decile.

High-income households have a significantly higher expenditure share of transport compared to low-income households. This may be because high-income households are more likely to use more expensive modes of transport for leisure as well as for work, such as air or railway travel, rather than the bus, for example. This effect is shown within the expenditure share differences, where air and railway travel have differences of 3 parts per 1000 and 6 parts per 1000, respectively in favour of high-income households. Passenger transport by road has a difference of 4 parts per 1000, in favour of low-income households. Within the transport division are classes such as new cars, second-hand cars and supplementary items such as fuel, lubricants and maintenance. These classes are typically expensive and as such, those households at the upper end of the income distribution tend to have high expenditure shares in these classes.

Similarly, to non-retired households, high-income households have a larger expenditure share of Restaurants and accommodation, compared with low-income and retired households, who have a large, contrasting expenditure share difference in the division Food and non-alcoholic beverages. This is mainly because low-income and retired households may be constricted to eating food at home, whereas high-income households may eat more of their meals out at restaurants. In our sample, 88% of high-income households are non-retired, and 40% of low-income households are retired.

This is supported by the expenditure share differences being heavily skewed towards the Food and non-alcoholic beverage division for low-income households, with an expenditure share of 70 parts per 1000, and the same effect regarding Restaurants, with an expenditure share of 25 parts per 1000 in favour of high-income households.

Figure 16 shows the annual growth rates for both low- and high-income households.

**Figure 16: Since November 2015, high-income households have experienced a higher rate of inflation than low-income households**

Household Costs Indices, low and high-income households, UK, 2005 to 2019

Figure 16: Since November 2015, high-income households have experienced a higher rate of inflation than low-income households

Household Costs Indices, low and high-income households, UK, 2005 to 2019



Source: Office for National Statistics - Household Costs Indices

Notes:

1. Low-income households are those within the second income decile, and high-income households are those within the ninth income decile.

After a negative spell for both low- and high-income households, the annual growth rates return positive in 2016. For the remainder of the series, the annual growth rates move at a similar rate, following the large gap in July 2016 with a difference of 0.4 percentage points. For this period, 94% of the time high-income households experience a higher rate of household inflation than low-income households. The cumulative effect of this is that the household cost index for high-income households has increased by an extra 1 percentage points above that for low-income households, since 2016.

The series begin to diverge in September 2019 where the mean difference in the annual growth rates between this point and the end of the sample period is 0.2 percentage points. The largest difference between these two data points occurs in October 2019, at 0.3 percentage points. This divergence can be explained by analysing the main drivers in the differences in the annual growth rates. Between September 2019 and December 2019, package holidays, gas and restaurants and cafes were the three largest contributors to the upward pressure felt on household costs for high-income households. For low-income households, the main drivers of downward pressure were tobacco, soft drinks and telephones.

Figure 17 takes a broader view and illustrates the eight main categories (which represent a simplified version of the twelve classification of individual consumption by purpose (COICOP) divisions) that have driven the differences in the annual growth rates for low- and high-income households since 2016. Hotels, restaurants and package holidays were the largest drivers, followed by transport and utilities. The large jump in the utilities category can be attributed to the Ofgem price cap, introduced in England, Wales and Scotland on 1 January 2019. Following this price cap, consumer prices for electricity fell by 4.9% between December 2018 and January 2019. This effect is discussed in more detail in our [Prices economic commentary: May 2019](#).

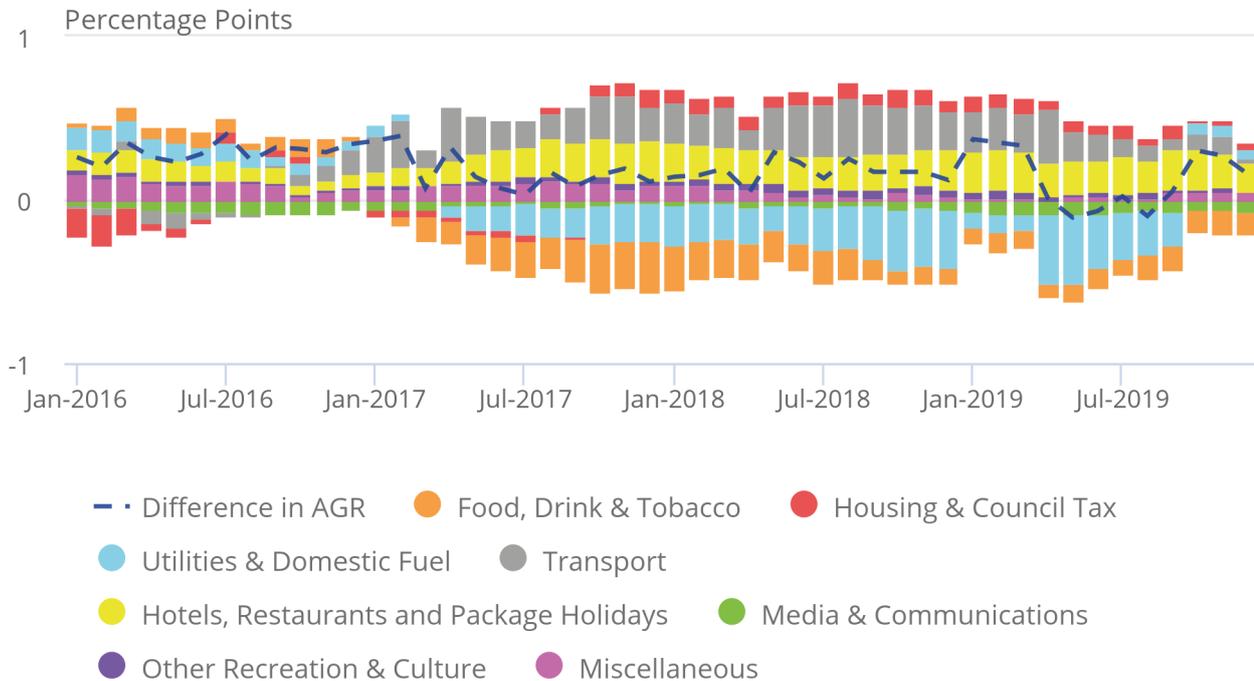
**Figure 17: Hotels, Restaurants and Package Holidays have been the largest contribution to the difference in annual growth rates since 2016**

Household Costs Indices, UK, 2005 to 2019

Contributions are greater below x-axis to indicate high-income households

Figure 17: Hotels, Restaurants and Package Holidays have been the largest contribution to the difference in annual growth rates since 2016

Household Costs Indices, UK, 2005 to 2019



Source: Office for National Statistics - Household Costs Indices

Notes:

1. Low-income households are those within the second income decile, and high-income households are those within the ninth income decile

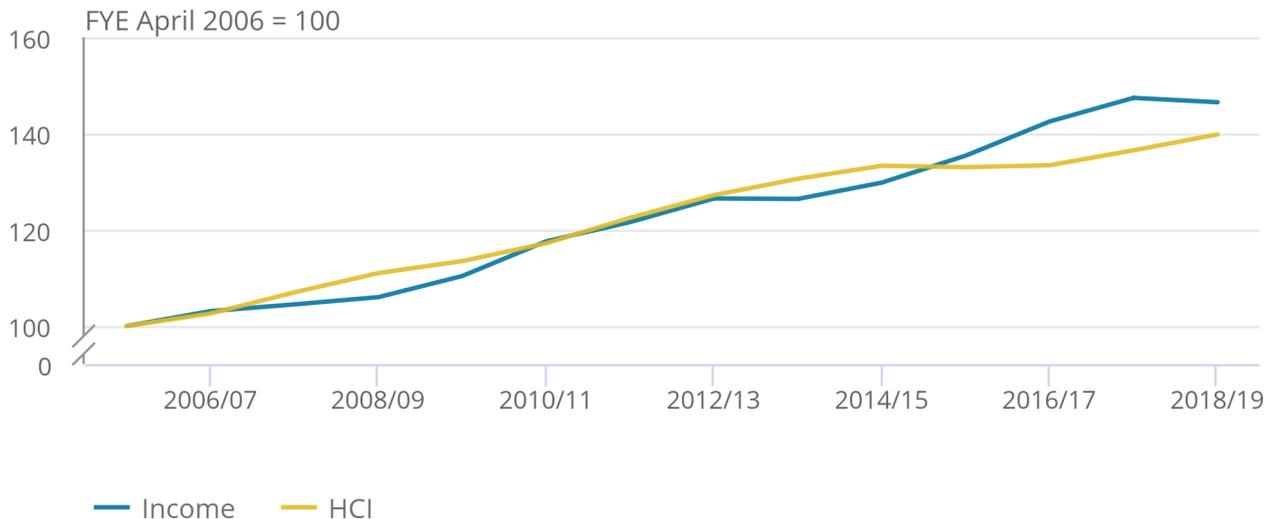
The experience of a squeeze in household budgets for low-income households is especially apparent when comparing the change in households' costs with their level of income. Household costs for low-income households have risen 40% between the period financial year ending (FYE) 2006 to FYE 2019. Household income for low-income households have risen 47% over the same time period, from a base of £11,241. For most of the time period, the increase in household costs for low-income deciles is larger than that of the income index for low-income households, meaning costs are rising faster than incomes. Income does rise above the Household Costs Indices (HCI) in FYE 2015, where it remains until the end of the series analysed. Therefore, the cumulative effect is that as of FYE 2019, incomes have risen faster than costs since FYE 2006.

**Figure 18: For low-income households, household costs have typically been higher than income.**

Mean equivalised household disposable income (nominal) and Household Costs Indices cumulative growth, UK, financial years ending 2006 to 2019

Figure 18: For low-income households, household costs have typically been higher than income.

Mean equivalised household disposable income (nominal) and Household Costs Indices cumulative growth, UK, financial years ending 2006 to 2019



Source: Office for National Statistics - Household Costs Indices

Notes:

1. Low-income households are those within the second income decile, and high-income households are those within the ninth income decile
2. See Section 10 for a discussion of the income measure.

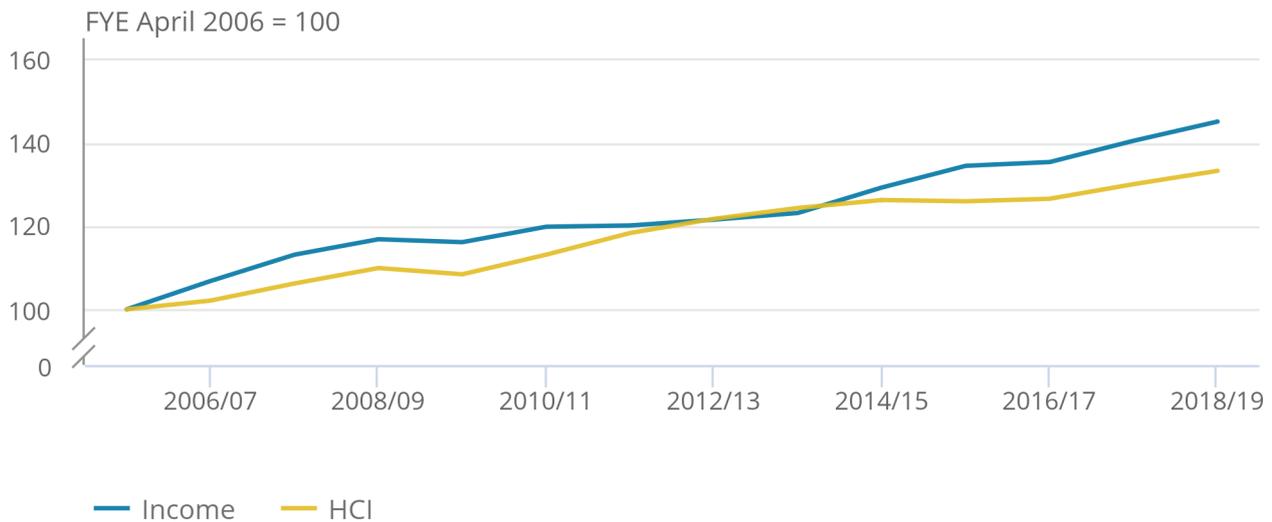
For high-income households, household income has increased by 45%, from a base income of £38,010 in FYE 2006, while household costs have increased by 34%. Household income for high-income households has remained above household costs for most of the sample period, except for the years FYE 2012 to FYE 2014. Following this, household income crosses back over household costs for high-income households and continues to grow faster than household costs for the remainder of the series.

**Figure 19: The gap between household costs and income for high-income households widens after FYE 2013**

Mean equivalised household disposable income (nominal) and Household Costs Indices cumulative growth, UK, financial years ending 2006 to 2019

Figure 19: The gap between household costs and income for high-income households widens after FYE 2013

Mean equivalised household disposable income (nominal) and Household Costs Indices cumulative growth, UK, financial years ending 2006 to 2019



Source: Office for National Statistics - Household Costs Indices

Notes:

1. Low-income households are those within the second income decile, and high-income households are those within the ninth income decile.
2. See Section 10 for a discussion of the income measure.

## 6 . Disabled and non-disabled households

For the first time this year we are analysing differences in household costs for disabled and non-disabled households. The questions used in the Living Costs and Food Survey (LCF) to identify disabled households were rephrased in 2013, resulting in a discontinuity in the dataset. For this reason, and due to the two-year lag in our expenditure weights (see Section 8 of the [Consumer Prices Technical Manual](#)), our analysis of disabled and non-disabled households begins in 2015.

Table 7 shows how disabled and non-disabled households are distributed across the other subgroups.

Table 7: Disabled households have lower incomes, are more likely to be retired and more likely to live in subsidised rented accommodation

Household Costs Indices, UK, 2005 to 2019

Subgroup	Disabled Non-disabled	
	Disabled	Non-disabled
<b>All households</b>	39%	61%
<b>Of Which:</b>		
<b>Retirement</b>		
Retired	39%	19%
Non-retired	61%	81%
<b>Income</b>		
% in 2nd income decile	13%	8%
% in 9th income decile	7%	12%
<b>Tenure type</b>		
Subsidised rented	26%	13%
Private rented	12%	20%
Owner occupied	62%	67%

Source: Office for National Statistics - Household Costs Indices

#### Notes

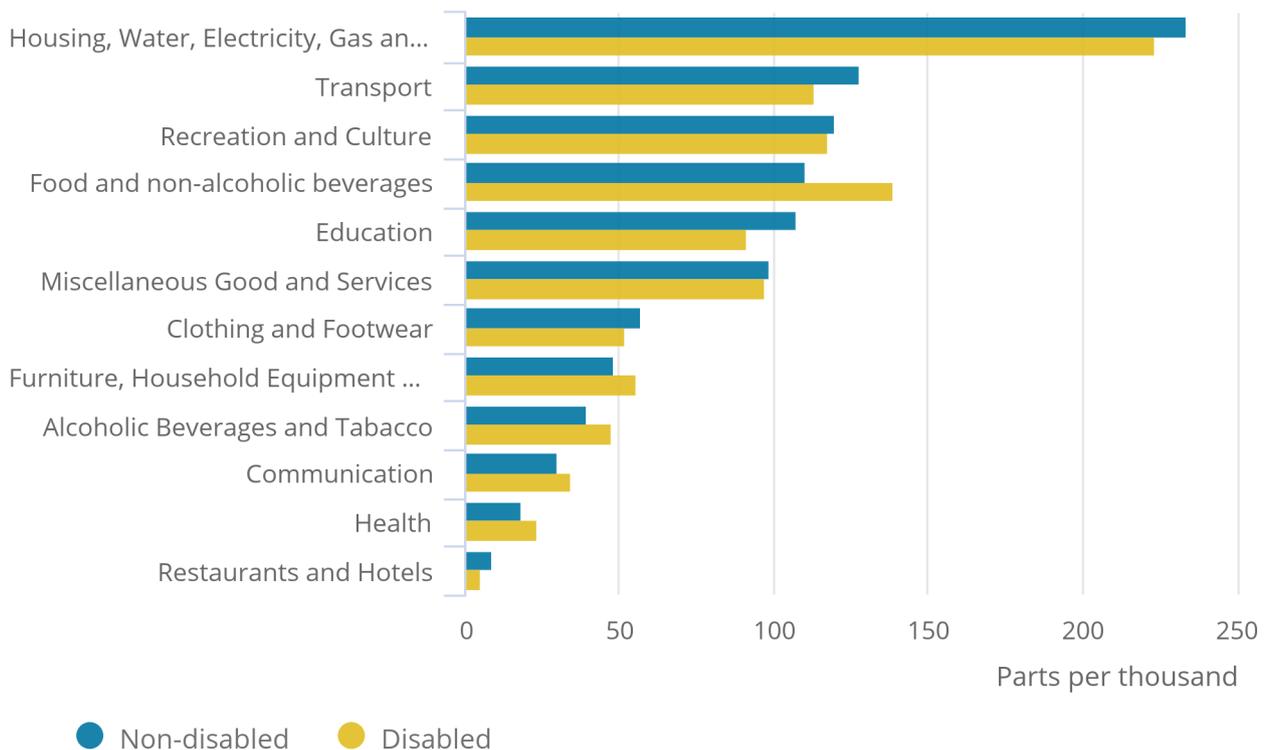
1. Totals may not sum to 100% within subgroups due to rounding. [Back to table](#)
2. Low-income households are those within the second income decile, and high-income households are those within the ninth income decile. These two subgroups will not sum to 100% as they only represent two of the ten income deciles. [Back to table](#)

**Figure 20: The largest difference in expenditure shares between disabled and non-disabled households is in food and drink**

Household Costs Indices, average expenditure share, UK, 2005 to 2019

**Figure 20: The largest difference in expenditure shares between disabled and non-disabled households is in food and drink**

Household Costs Indices, average expenditure share, UK, 2005 to 2019



Source: Office for National Statistics

Notes:

1. Expenditure shares may not sum to 1000 due to rounding.
2. Weights for each category of spending are averaged across the period of 2005 to 2018.

The pattern of expenditure share distribution across classification of individual consumption by purpose (COICOP) divisions for disabled households resembles that of retired households in many cases, as might be expected given the overlap in their populations. There is a difference in housing; retired households spend a greater share of expenditure on housing than non-retired households, however disabled households spend a smaller share on housing than non-disabled households. This difference is explained by the gap in expenditure shares for gas, electricity and council tax between retired and non-retired households being larger than for disabled and non-disabled households.

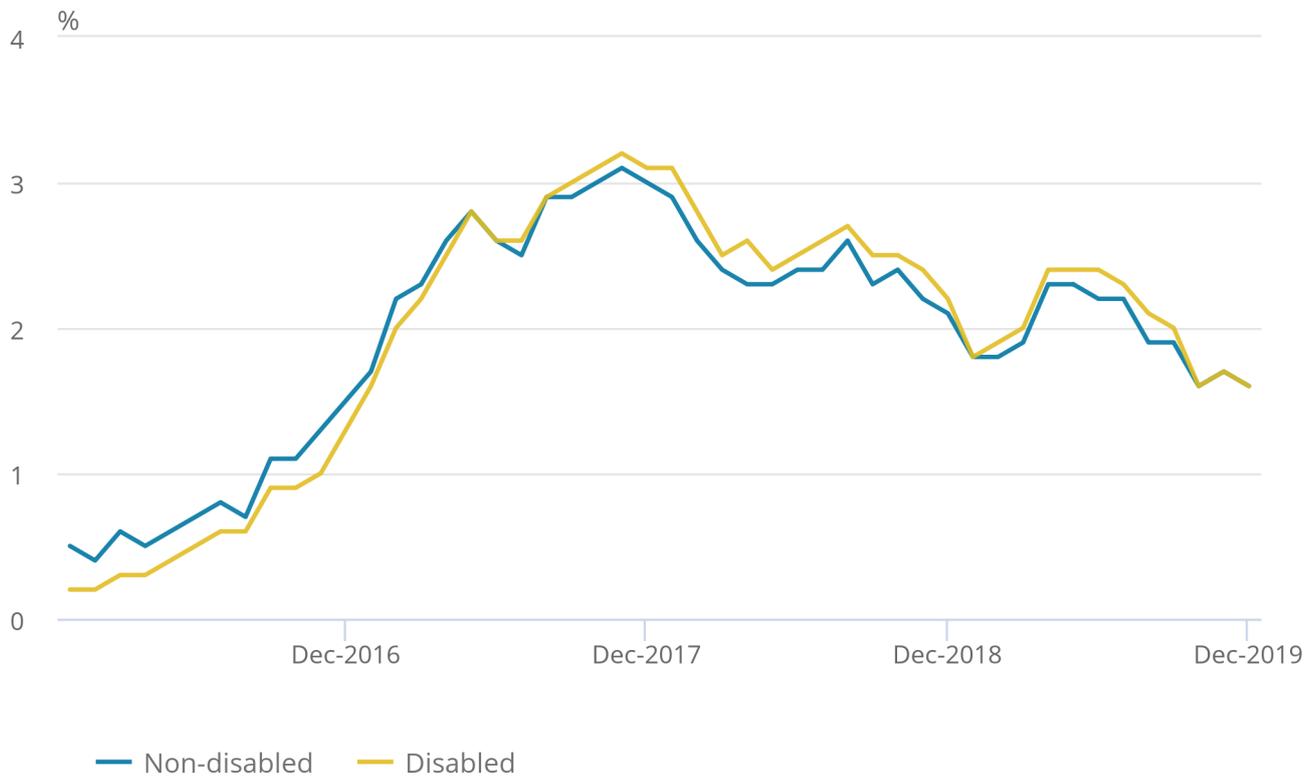
Figure 21 shows how the growth rates for disabled and non-disabled households have changed over time.

## Figure 21: Growth rates for disabled and non-disabled households have tracked each other closely

Household Costs Indices, disabled and non-disabled households, UK, 2005 to 2019

### Figure 21: Growth rates for disabled and non-disabled households have tracked each other closely

Household Costs Indices, disabled and non-disabled households, UK, 2005 to 2019



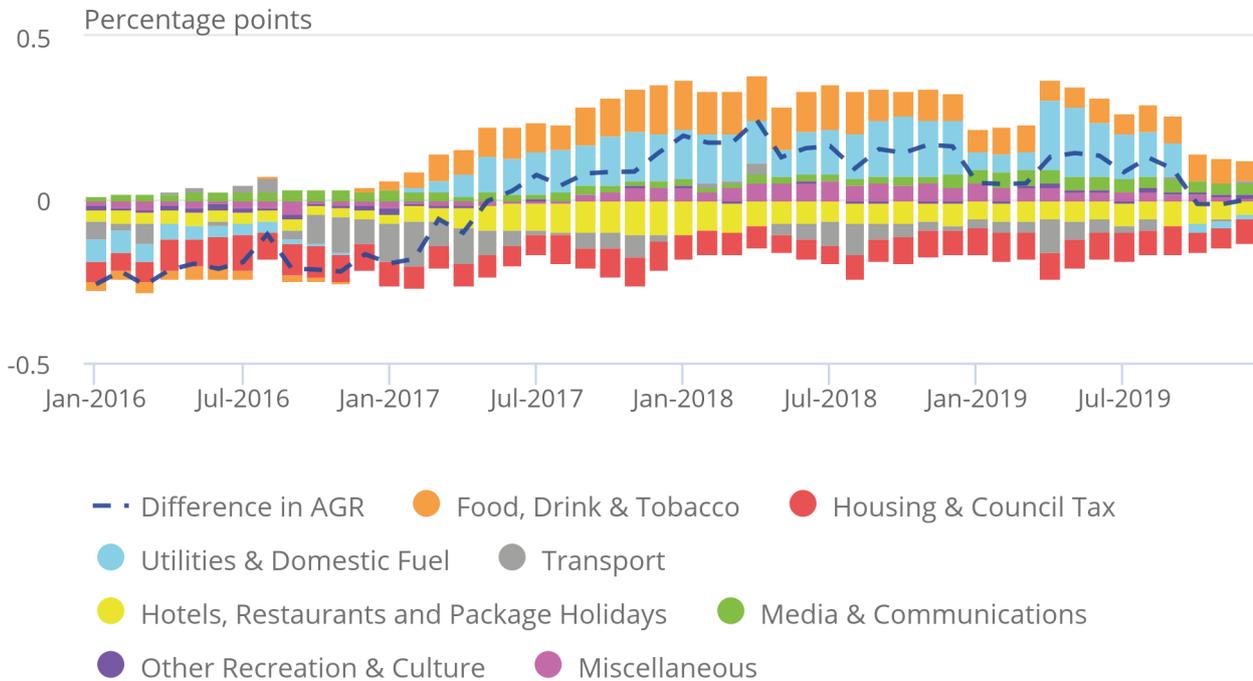
Source: Office for National Statistics - Household Costs Indices

From the start of our series in January 2016 to the end of 2019, the difference in growth rates for disabled and non-disabled households has only exceeded 0.2 percentage points on two occasions – January and March of 2016. Non-disabled households had higher growth rates at first, however the series crossed in June 2017 and disabled households have had slightly higher growth ever since. The cumulative effect of this over the whole series is that disabled households' prices have increased by a very small margin of just 0.06 percentage points above non-disabled households in four years.

Underneath the headline rates we can see how individual expenditure categories are contributing to this picture.

**Figure 22: Increased contributions from food and utilities have raised disabled household's growth rates above non-disabled**

Contributions are greater below x-axis as disabled households raised disabled household's growth rates above non-disabled



**Source: Office for National Statistics - Household Costs Indices**

**Notes:**

1. Household Costs Indices, retired and non-retired households, UK, 2005 to 2019

The large changes in the food and utilities categories starting in April 2017 in the above chart are mainly driven by just two classes. The first is electricity, which contributed an average of 0.09 percentage points to the difference in growth rates since April 2017. The other is tobacco, which contributed an average of 0.04 percentage points. As discussed in the section on retired and non-retired households, both classes have seen large price increases since 2017, and their impact on disabled households reflects the overlap in this subgroup's composition with retired households.

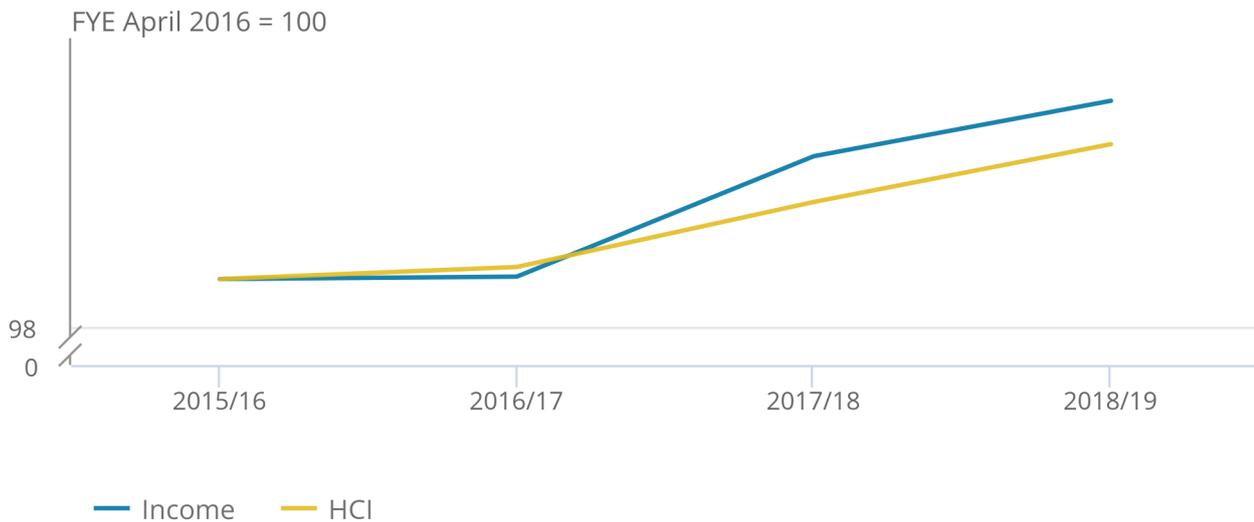
Household costs for non-disabled households have increased by 6% over the series, but household income has grown faster by 7%, from a base income of £36,404 in 2015 to 2016.

**Figure 23: Household income for non-disabled households rises faster than household costs following April 2016**

Mean equivalised household disposable income (nominal) and Household Costs Indices cumulative growth, UK, financial years ending 2006 to 2019

**Figure 23: Household income for non-disabled households rises faster than household costs following April 2016**

Mean equivalised household disposable income (nominal) and Household Costs Indices cumulative growth, UK, financial years ending 2006 to 2019



Source: Office for National Statistics - Household Costs Indices

Notes:

1. See Section 10 for a discussion of the income measure.

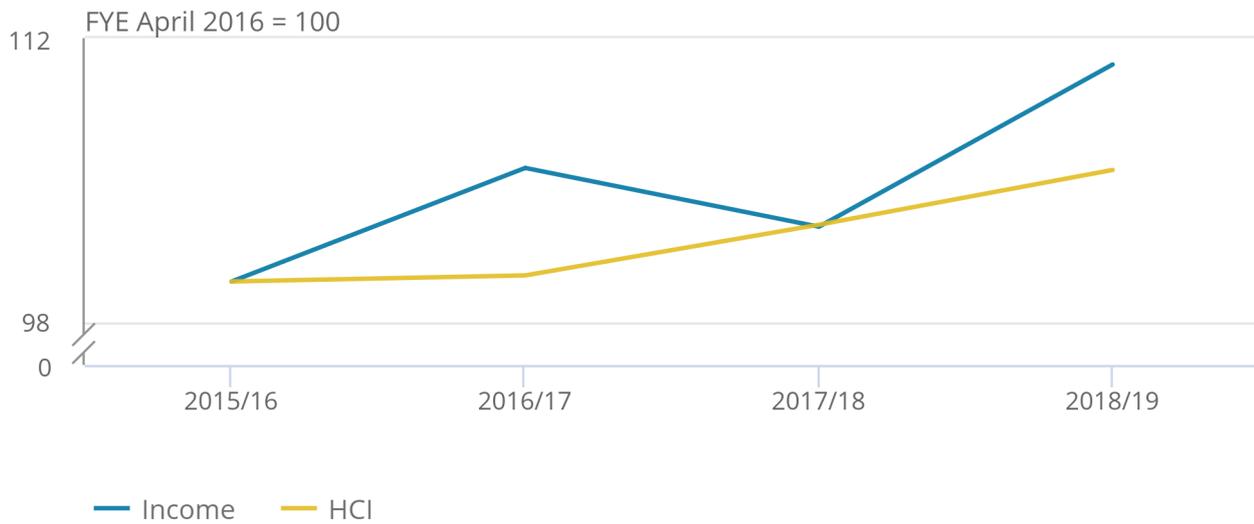
For disabled households, household income has moved in a volatile fashion, with a sharp rise at the start of financial year 2015 and a sharp decline after the beginning of financial year 2016. This is likely due to the small sample size present for disabled households. Over the sample period, household costs have increased by 5% for disabled households, compared with household income, which has grown by 11% from a base income of £28,126 in 2015 to 2016.

**Figure 24: Household income for disabled households rises in a volatile fashion, whilst household costs increase gradually over the sample period**

Mean equivalised household disposable income (nominal) and Household Costs Indices cumulative growth, UK, financial years ending 2006 to 2019

Figure 24: Household income for disabled households rises in a volatile fashion, whilst household costs increase gradually over the sample period

Mean equivalised household disposable income (nominal) and Household Costs Indices cumulative growth, UK, financial years ending 2006 to 2019



Source: Office for National Statistics - Household Costs Indices

**Notes:**

1. See Section 10 for a discussion of the income measure.

## 7 . HCIs 2019- Dataset

[Household Costs Indices preliminary estimates, 12-month growth rates, expenditure shares and contributions for UK household groups and all-households](#)

Dataset | Updated 21 July 2020 Household Costs Indices, 12-month growth rates, expenditure shares and contributions for UK household groups and all-households.

## 8 . Glossary

## Disposable income

Disposable income is that which is available for consumption and is equal to all income from wages and salaries, self-employment, private pensions and investments, plus cash benefits less direct taxes.

## Equivalised

Equivalisation is the process of accounting for the fact that households with many members are likely to need a higher income to achieve the same standard of living as households with fewer members.

Equivalisation considers the number of people living in the household and their ages, acknowledging that while a household with two people in it will need more money to sustain the same living standards as one with a single person, the two-person household is unlikely to need double the income. This analysis uses the modified-Organisation for Economic Co-operation and Development (OECD) equivalisation scale.

## Retired and non-retired households

A retired person is defined as anyone who describes themselves in the Living Costs and Food Survey (LCF) as "retired" or anyone over minimum National Insurance pension age describing themselves as "unoccupied" or "sick or injured but not intending to seek work". A retired household is defined as one where the combined income of retired members amounts to at least half the total gross income of the household.

## Low- and high-income households

For the purpose of our analysis, low-income households are those within the second income decile and high-income households are those within the ninth income decile. The reasons for choosing the second and ninth deciles are described in the [CPIH-consistent inflation rate estimates for UK household groups](#).

## Households classified by tenure type

We categorise households into three tenure types: subsidised rented, privately rented and owner-occupied.

Subsidised renter households are defined as any household that either rents their property from a council, a registered social landlord or live in their property rent-free. Privately rented households are defined as any household that rents their property from a private sector landlord. It excludes households who live in their property rent-free.

Owner-occupier households are defined as any household in which the residents own the property outright or are buying the property with a mortgage.

## Disabled and non-disabled households:

Households are categorised as disabled if they report any physical or mental health conditions that have lasted or are expected to last twelve months or more, and their condition reduces their ability to carry out day-to-day activities. This is consistent with the definition in the Equality Act 2010.

## 9 . Measuring the data

## What are the Household Costs Indices?

The Household Costs Indices (HCIs) are a set of experimental measures, currently in development, that aim to reflect UK households' experience of changing prices and costs. More specifically, they aim to measure how much the nominal disposable income of different household groups would need to change, in response to changing prices and costs, to enable households to purchase the same quantities of goods and services at a fixed quality. Put simply, the broad approach of the HCIs is to measure changes in the cost of outgoings of households.

The HCIs complement our other measures of price change:

- the Consumer Prices Index including owner-occupiers' housing costs (CPIH), which is our most comprehensive measure of inflation and is based on economic principles (measuring changes in the cost of consumption goods and services is extremely important for measuring economic activity in the UK)
- the Consumer Prices Index (CPI), which is also based on economic principles but omits certain housing costs; it is an internationally comparable measure
- the Retail Prices Index (RPI) - a legacy measure that only continues to be produced for essential existing user needs

For more information, please refer to the article, [Measuring changing prices and costs for consumers and households, proposed updates: March 2020](#).

The HCIs and CPIH methodology currently differs in five distinct ways:

- the HCIs adopt a "democratic" weighting approach, which assigns equal weight to each household's share of expenditure
- the HCIs measure directly the payments that owner-occupiers make to consume housing services (including mortgage interest payments, dwelling insurance, ground rent and Stamp Duty Land Tax)
- the HCIs also use a payments approach for higher education, accounting for student loan repayments and tuition fees paid upfront separately
- the HCIs include a measure of interest costs on credit card debt, as they impact a household's budget
- in the measurement of insurance premiums, CPIH expenditure weights are based on the service charge element of an insurance package, whereas the HCIs expenditure incorporates the full cost, including money used to reimburse households

More information on the methodology used to calculate these indices can be found in the methodology articles that accompany each release: [Household Costs Indices, methodology](#), and [Household Cost Indices UK: methodology for second preliminary estimates, 2005 to 2018](#). For this release we have made improvements, enhancing the treatment of education costs, interest on consumer debt and housing:

- we have made improvements to how we model student loan repayments, and now include tuition fees paid upfront
- we have expanded our measure of interest on consumer debt beyond credit cards to include secured and unsecured personal loans, overdrafts, and mail-order purchases
- updated the treatment of stamp duty in the owner-occupier housing costs (OOH) (payments) measure (see [Measures of owner occupiers' housing costs, UK: January to March 2020](#) for details)
- applied separate class-level indices for private and subsidised rents

More information can be found in the forthcoming methodological article for this release.

The HCIs are still in development, and as such future estimates of the HCIs are expected to have different, or additional, items in scope. Furthermore, some of the aspects of methodology presented in this bulletin may be improved. Therefore, the aim of this bulletin is to update users on progress towards development of the HCIs. For more information on other proposals that have been suggested for the HCIs, please refer to [Developing the Household Costs Indices](#).

With regards to creating subgroup measures, the methods used in this bulletin are consistent with the methodology to calculate CPIH-consistent inflation rates for UK household groups.

## **Owner occupiers' housing costs (OOH)**

As the Household Costs Indices (HCIs) use a different approach to measuring OOH, the aggregate expenditure on OOH (payments) is reconciled with households in the Living Costs and Food Survey (LCF) based on their expenditure on housing-related payments (such as mortgage interest payments, transaction costs and taxes). Council Tax is a cost faced by all households regardless of whether they own their own home or not, so is included as an item for all-households, rather than in the OOH measure.

## **Interest costs on consumer financial debt**

This measure is unique to the HCIs. We consider three sources of debt: credit cards and mail orders, overdrafts, and personal loans:

- aggregated expenditure on credit card and mail order interest from survey (LCF and Wealth and Assets Survey (WAS)) and Bank of England data is apportioned to households based on their reported credit card interest expenditure in the LCF
- the proportion is calculated from the average of secured and unsecured loan interest rates, and both series are published by the Bank of England
- For overdrafts, total expenditure from the LCF was estimated through a regression model built from WAS data

The approaches to the various forms of debt are explained fully in the forthcoming article *Household Costs Indices: methodology for third preliminary estimates, 2005 to 2019*.

## Higher education payments

Whilst the cost of university education is not unique to the HCIs, the approach to measurement does differ from our other consumer price statistics. The HCIs capture both the cost of repaying a student loan and the price of tuition fees paid directly. The aggregate expenditure on student loan repayments is reconciled with households in the LCF based on their reported expenditure on student loan repayments. More detail is provided in the articles [Household Cost Indices, UK: methodology for second preliminary estimates, 2005 to 2018](#), and the forthcoming Household Costs Indices: methodology for third preliminary estimates, 2005 to 2019.

## Weights

Price indices are constructed using price and expenditure data. These expenditure shares can be calculated using different methodological approaches; the main two are democratic and plutocratic weighting. We have also produced a methodology article [Investigating the impact of different weighting methods on CPIH](#) that compares the two approaches, alongside additional approaches to weighting a price index.

For the purpose of this article democratic weighting is used, for both the household group indices and the all-households index.

The HCIs use a different weight to CPIH for insurance spending categories. Gross insurance expenditure is used, such that money redistributed to households for insurance claims is captured rather than netted out. The aggregate expenditure on insurance is reconciled with households in the LCF based on their reported expenditure on insurance.

# 10 . Strengths and limitations

## Price index data

While the calculation of household group measures is straightforward analytically, a range of data constraints make their estimation challenging in practice. For instance, an analysis of household group specific rates would ideally use price indices and expenditure weights specific to each household group. This would reflect the fact that different households will purchase goods and services from different outlets and therefore face different prices.

However, data are not available on household-group specific price indices, and therefore this bulletin uses national price indices as an approximation. There are also challenges that arise from the data sources that are available to calculate the expenditure shares. For more information, please see the [methodology publication](#) for CPIH Subgroups.

## Income data

Comparing the cost and income measures should be undertaken with caution, as there are elements within the two measures that mean they are not coherent. For example, the HCIs include changes in the cost of Council Tax, while the disposable income measure provided in this bulletin deducts direct taxes (including Council Tax). This means that any changes in the cost of Council Tax will be counted in both measures. [The measurement of real income in the UK: options for a coherent approach](#) provides details of how measures of income and measures of changing prices and costs should be produced so that they are coherent.

The income data presented in this year's results paper may differ slightly from last year's release, due to the nature of the [Survey of Personal Incomes \(SPI\) adjustment](#). This adjustment has been made to counteract the under-coverage and under-reporting of top incomes in ONS statistics derived from the Living and Food Costs Survey (LCF).

The SPI adjustment involves replacing the incomes of the richest 0.32% and 1.16% of working-age people and pensioners, respectively, with cell-mean imputations based on corresponding observations in tax return data. The SPI adjustment also stratifies separately for Great Britain and Northern Ireland.

## **The presence of high-income households being recorded as subsidised renters**

Tables 2 and 3 both report a very small percentage of high-income households being recorded as subsidised renters. This result is obviously unexpected but may be explained by the fact that a small number of social renting households do record owning a second home. This second home may be a property that they have purchased but not yet moved into, or a property inherited but not yet disposed of, or a property they have brought for other family members to live in while retaining tenancy of their original council property. Each of these situations is very rare but will occur from time to time.

## **11 . Related links**

[CPIH- consistent inflation rate estimates for UK household groups: October to December 2019](#)

Article | Released 19 February 2020

Estimates of inflation rates for different types of household in the UK on a Consumer Prices Index including owner occupiers' housing costs (CPIH)-consistent basis.