

Article

Inflation rates for discretionary and nondiscretionary spending: December 2021

Experimental data estimating consumer price inflation rates for discretionary and nondiscretionary spending.

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1. Main points

- Since January 2005, prices for non-discretionary items have risen by around 49%, while prices for discretionary items have risen by around 41%.
- Annual growth rates for discretionary and non-discretionary spending have converged in recent months.
- In November 2021, the 12-month growth rate in prices for discretionary items was 5.2%, while non-discretionary items saw 4.1% price growth.
- Energy and transport are the biggest drivers of price movements in the non-discretionary category while discretionary inflation is generally more broad based
- Lower income households typically spend a higher proportion of their expenditure on non-discretionary items, compared with higher income households.

2. Overview

Consumer price inflation, as measured by both the Consumer Prices Index (CPI) and our lead measure, the Consumer Prices Index including owner occupiers' housing costs (CPIH), has risen sharply in recent months. This analysis looks within these trends using experimental data to separate out aggregated price movements for discretionary and non-discretionary items. We also provide context for how these price movements may affect some consumers more than others, and how the picture may have changed since the beginning of the coronavirus (COVID-19) pandemic.

Consumer price inflation is measured using a basket of goods and services to capture different types of consumption. Some purchases are more discretionary than others, and therefore likely to be more responsive to changes in prices and / or incomes. As such, spending on discretionary items would be more likely to fall if prices increase, or incomes fall, as consumers are able to avoid or delay spending on these items. However, spending on non-discretionary items is inherently less avoidable. Such changes in consumption patterns are reflected in annual updates to weights in the consumer prices basket but will nonetheless affect how consumers experience inflation immediately when prices change.

This analysis builds on work done by the Australian Bureau of Statistics (ABS) and we follow the same definition of discretionary and non-discretionary.

Non-discretionary:

Goods or services which are purchased because they meet a basic need (food, shelter, healthcare), are required to maintain current living arrangements (car maintenance, school fees), or are a legal obligation (compulsory insurance, stamp duty).

Spending on these goods or services may be less responsive when there are changes in household wealth and incomes, or changes in the relative prices of goods or services.

Discretionary:

Goods or services which could be considered "optional" purchases, such as takeaway meals, alcohol and holidays.

Spending on these goods and services may be more responsive to changes in household wealth or relative prices.

Some of the items included in the discretionary and non-discretionary categories differ slightly from those in the ABS analysis, reflecting some differences in the composition of our price baskets, including our use of CPIH as our lead measure of consumer price inflation. More detail can be found in the data sources and quality section.

3. Long-term trends

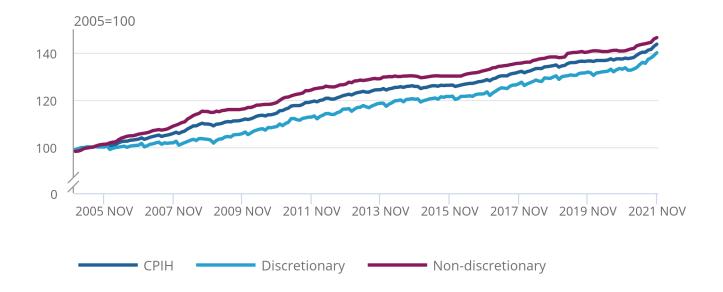
By splitting the components of the CPIH basket into discretionary and non-discretionary categories, we can estimate price movements for each. Figure 1 shows how prices have moved for discretionary spending, non-discretionary spending and the all-items CPIH index. Since January 2005, average prices for non-discretionary items have increased by around 49.1%, compared with an increase of around 41.3% for discretionary items. The index for non-discretionary items has remained consistently above that for discretionary items since July 2005, but much of this difference emerged around the financial crisis in 2008 and 2009, with the gap narrowing more recently.

Figure 1: Cumulative non-discretionary price growth has been greater than discretionary since 2005

CPIH Index, UK, January 2005 to November 2021

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CPIH Index, UK, January 2005 to November 2021



Source: Office for National Statistics – Consumer prices inflation

Figure 2 shows the 12-month growth rate for discretionary, non-discretionary and CPIH, with a clear difference being apparent from 2006, and growing in 2008. Annual growth for non-discretionary spending rose sharply from August 2007, reaching a peak in September 2008, before falling back and below growth for discretionary spending in September 2009. This shows that, while the price index remained higher for non-discretionary spending, the annual change in the price level was higher for discretionary spending at this time. Annual price changes for discretionary and non-discretionary spending have been much more aligned since the gap narrowed in late 2009.

Figure 2: Non-discretionary spending had much higher annual price growth than discretionary spending from 2006 to 2009

CPIH, discretionary and non-discretionary 12-month price growth, UK, January 2006 to November 2021

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CPIH, discretionary and non-discretionary 12-month price growth, UK, January 2006 to November 2021



Source: Office for National Statistics - Consumer prices inflation

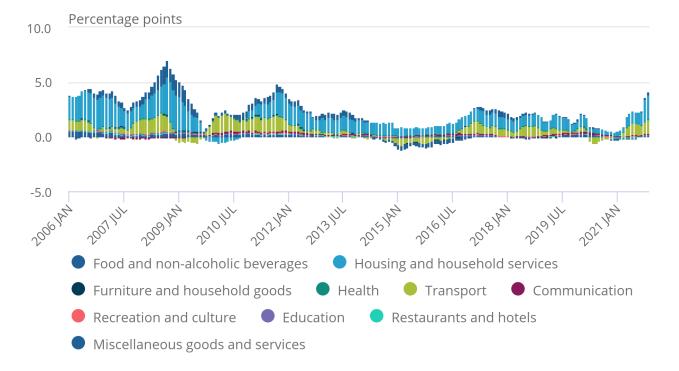
Figure 3 shows contributions to the 12-month growth rate of non-discretionary spending by the non-discretionary components of each division within CPIH. It is clear that housing and household services, as well as transport, have been large drivers of movements in the non-discretionary growth rate for many years. This likely reflects the generally volatile nature of price movements for these components, compared with other items. The sharp drop in contributions from housing and household services from 2008 to 2009 also partly reflects the role of imputed rents in CPIH, which is based on rental prices, and turned negative during the financial crisis.

Figure 3: Transport and electricity, gas and other fuels have been the main drivers of non-discretionary inflation over many years

CPIH, Contributions to the 12-month growth rate of non-discretionary inflation by division, UK, January 2006 to November 2021

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CPIH, Contributions to the 12-month growth rate of non-discretionary inflation by division, UK, January 2006 to November 2021



Source: Office for National Statistics – Consumer prices inflation

Figure 4 shows contributions to the 12-month growth rate of discretionary inflation from the discretionary components of each division of CPIH. From 2006 to 2010, when we saw the largest gap between growth in discretionary and non-discretionary prices, there was a strong downward pull coming from clothing and footwear, and recreation and culture. Since 2010, most components have made positive contributions to the 12-month growth rate of discretionary inflation. However, this has become more varied since the beginning of the coronavirus pandemic, which is discussed in more detail in the Recent trends section.

Figure 4: All relevant divisions have made positive contributions to the 12-month growth rate of discretionary inflation in recent months

CPIH, Contributions to the 12-month growth rate of discretionary inflation by division, UK, January 2006 to November 2021

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CPIH, Contributions to the 12-month growth rate of discretionary inflation by division, UK, January 2006 to November 2021



Source: Office for National Statistics – Consumer prices inflation

4. Recent trends

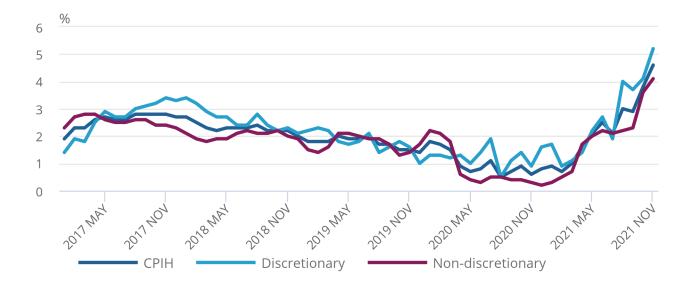
Looking at more recent trends, we can see that annual price growth for non-discretionary spending fell sharply at the beginning of the coronavirus (COVID-19) pandemic, remaining relatively low throughout 2020, before beginning to rise in early 2021. Price growth for discretionary spending has been considerably more volatile with sharp peaks and troughs through 2020 and 2021. This may partly reflect collection issues experienced at various stages of the coronavirus pandemic, with prices being imputed when items were unavailable, then actual prices re-entering the basket as items became available again. For the most part, items that were unavailable because of coronavirus restrictions fell into the discretionary category. These include eating out (restaurants and hotels), cinema tickets and sports matches (recreation and culture) and holidays. However, some discretionary items also saw increased demand during the pandemic, such as computer games and streaming services.

Figure 5: Non-discretionary price growth fell during the coronavirus pandemic and has since risen sharply

CPIH, discretionary and non-discretionary 12-month growth price growth, UK, January 2017 to November 2021

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CPIH, discretionary and non-discretionary 12-month growth price growth, UK, January 2017 to November 2021



Source: Office for National Statistics - Consumer prices inflation

Price growth for discretionary spending rose sharply from 2% in July 2021 to 4.1% in August 2021. This growth was driven largely by base effects from the Eat Out to Help Out Scheme in August 2020 when restaurant meals were discounted and had a downward pull on inflation. You can find out more about this growth in our Consumer Price Inflation, UK: August 2021 bulletin. However, the growth rate of 5.2% in November 2021 reflects more broad-based inflationary pressures, including increased contributions from restaurants and hotels, education, transport and furniture and furnishings.

Figure 6: Price growth for discretionary spending has risen sharply since July 2021

CPIH, Contributions to the 12-month growth rate of discretionary inflation, UK, January 2017 to November 2021

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CPIH, Contributions to the 12-month growth rate of discretionary inflation, UK, January 2017 to November 2021



Source: Office for National Statistics - Consumer prices inflation

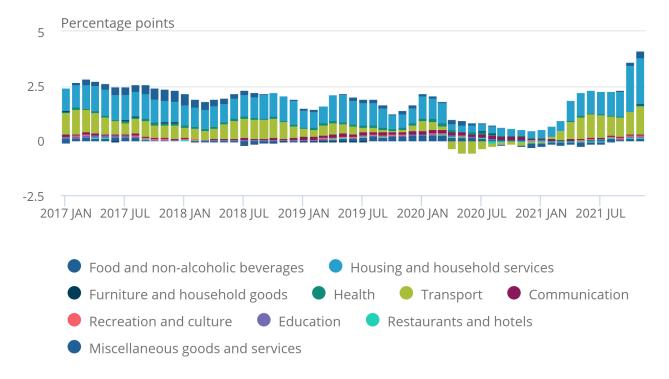
Price growth for non-discretionary spending rose sharply from 2.3% in September 2021 to 3.6% in October 2021, and 4.1% in November 2021, driven mainly by housing and household services. Transport has also been a big driver of movements in the 12-month growth rate of non-discretionary inflation in recent years, with prices falling at the beginning of the coronavirus pandemic and rising sharply more recently. The other components of non-discretionary inflation have made relatively stable contributions to the 12-month growth rate.

Figure 7: Transport and electricity, gas and other fuels have made strong upward contributions to nondiscretionary inflation in October and November 2021

CPIH, Contributions to the 12-month growth rate of non-discretionary inflation, UK, January 2017 to November 2021

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CPIH, Contributions to the 12-month growth rate of non-discretionary inflation, UK, January 2017 to November 2021



Source: Office for National Statistics – Consumer prices inflation

Much of the recent increase in price growth for non-discretionary spending comes from energy prices, with the uplift in the Office of Gas and Electricity Markets (Ofgem) energy price cap leading to an increase in gas and electricity prices of 28.1% and 18.8%, respectively, in the year to October 2021 (when the new cap was introduced). Motor fuels have also seen considerable price increases in recent months, adding to the upward pressure on non-discretionary inflation. Other items have also put upward pressure on prices with all divisions making a positive contribution to the 12-month growth rate of non-discretionary inflation in recent months.

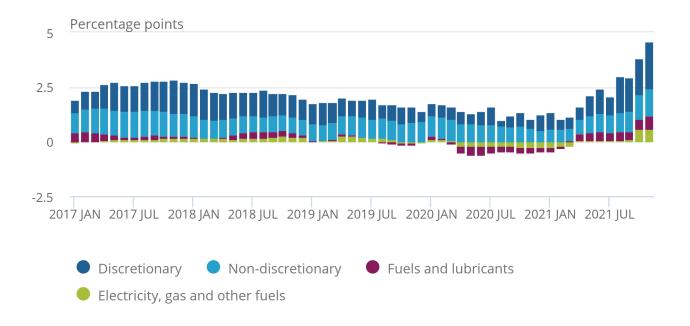
Figure 8 shows contributions to overall Consumer Prices Index including owner occupiers' housing costs (CPIH) from discretionary and non-discretionary spending. It also shows contributions from gas, electricity, and other fuels, and fuels and lubricants, separated out to show their individual impact.

Figure 8: Energy and fuels have pushed up inflation since October 2021

Contribution to 12-month CPIH growth rate, UK, January 2017 to November 2021

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Contribution to 12-month CPIH growth rate, UK, January 2017 to November 2021



Source: Office for National Statistics – Consumer prices inflation

Electricity, gas and other fuels, and fuels and lubricants, both made negative contributions to the 12-month growth rate of CPIH through much of 2020. This contributes to the relatively low growth rate for non-discretionary items over that period. They have both made positive contributions since May 2021, partly reflecting base effects given their falling prices in 2020, and have had particular impact in October and November 2021. Contributions from the remaining non-discretionary items have been considerably more stable.

It should also be noted that, while demand for non-discretionary items is assumed to be less responsive to price changes, in some cases the price reflects changes in consumer demand. In particular, prices for fuels and lubricants fell sharply in 2020 in response to falling demand - both domestically and internationally - during the initial months of the coronavirus pandemic. Producers were relatively slow to cut output, resulting in oversupply. This meant that many people didn't benefit from the fall in prices as much as we would typically assume, as they were consuming less for other reasons, namely travelling less during the initial national lockdown.

5. Household experiences of inflation

Consumers experience inflation differently depending on their individual basket of goods and services and the price movements of the specific items they buy most. The breakdown of discretionary and non-discretionary inflation adds to our understanding of the experience of different households. Non-discretionary spending includes more items that might be considered "essential" and therefore necessary for all households, while discretionary spending may be more relevant to those on higher incomes.

Figure 9 shows the proportion of each division of Consumer Prices Index including owner occupiers' housing costs (CPIH) that falls into discretionary or non-discretionary spending, based on the weights for 2021. While most components are a mix of discretionary and non-discretionary, some fall entirely, or almost entirely, into one of them. Housing and household services, communication and health are considered entirely non-discretionary, while alcohol and tobacco, and clothing and footwear are considered entirely discretionary. Furnishings, household equipment and services, and restaurants and hotels are both almost entirely discretionary.

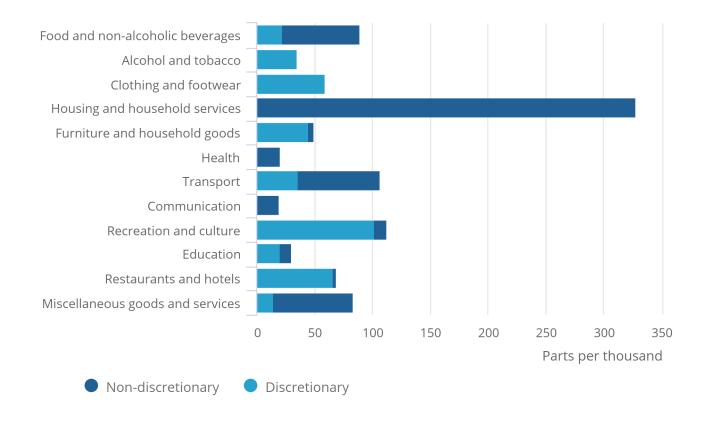
Overall, non-discretionary spending has a higher weight than discretionary spending (61.1% compared with 38.9%), with housing and household services making up a large proportion of that. This means that a higher proportion of spending in 2021 is assumed to be on items that fall within the non-discretionary category.

Figure 9: Overall, non-discretionary spending has a higher weight than discretionary spending

CPIH division weight classification, parts per thousand, UK, 2021

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CPIH division weight classification, parts per thousand, UK, 2021



Source: Office for National Statistics – Consumer prices inflation

Figure 10 shows the 2020 proportion of expenditure in different categories for those in the second and ninth income deciles. Income deciles divide the household income distribution into 10 equal parts. Households with the smallest income lie in the first decile and those with the largest income lie in the top decile. For this analysis we use the second and ninth deciles to avoid outliers in the first and tenth income deciles, and give a more realistic picture of different household experiences.

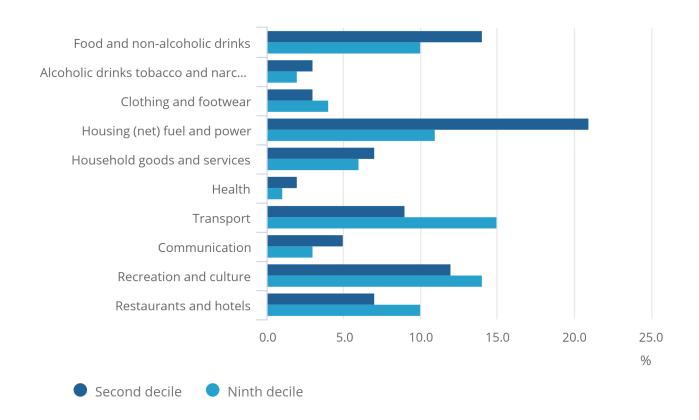
We can see that for the three components of CPIH that fall entirely into non-discretionary spending – housing and household services, health and communication – those in the second income decile spend a higher proportion of their expenditure than those in the ninth decile do. Those in the second income decile also spend proportionately more on food and non-alcoholic beverages, which mainly falls into non-discretionary spending.

Figure 10: Those on lower incomes spend proportionately more on housing and food than those on higher incomes

Percentage of total household expenditure by COICOP for second and ninth income deciles, UK, 2019 to 2020

Figure 10: Those on lower incomes spend proportionately more on housing and food than those on higher incomes

Percentage of total household expenditure by COICOP for second and ninth income deciles, UK, 2019 to 2020



Source: Office for National Statistics – Living Costs and Food Survey

Notes:

- 1. Housing (net) fuel and power excludes mortgage interest payments, council tax and Northern Ireland rates.
- 2. Households are ranked by their non-equivalised household gross income using the modified OECD scale.

Those at the higher end of the income scale spend a higher proportion of their expenditure than those at the lower end on some discretionary or mainly discretionary categories. These include clothing and footwear, restaurants and hotels, and recreation and culture. Those in the second income decile spend a slightly higher proportion of their expenditure on alcohol and tobacco (discretionary) and furniture and furnishings (mainly discretionary).

From these comparisons it seems likely that those on lower incomes are more exposed to price changes in non-discretionary spending than those on higher incomes. This is because they spend almost double the proportion of their expenditure on housing and household services than those in the ninth income. This analysis also does not account for the proportion of incomes that are unspent, as it is based on the proportion of expenditure in each income decile. The impact of the coronavirus pandemic will also have affected the levels of expenditure in all households.

Provisional estimates between the financial year ending 2020 and 2021 shows the <u>different experience of households during the pandemic</u>, when it was generally reported that people were spending less and saving more. Table 1 shows how much weekly household spending changed for each income quintile between financial year end 2020 and financial year end 2021. Income quintiles divide the household income distribution into five equal parts with the lowest incomes in the first quintile and the highest incomes in the fifth quintile.

Table 1: Household spending declined among all income quintiles in the year to March 2021 Change in weekly household spending, by household income quintile, UK, financial year ending (FYE) 2020 to FYE 2021

Income quintile	Percentage of change	Absolute change
1 (lowest income)	-12.50%	-£41.00
2	-15.50%	-£67.10
3	-18.40%	-£101.50
4	-20.70%	-£142.60
5 (highest income)	-20.60%	-£193.10
All households	-18.60%	-£109.10

Source: Office for National Statistics - Living Costs and Food Survey

Notes

1. Households are ranked by their equivalised household disposable income using the modified OECD scale.

While weekly spending declined for all income quintiles, the lower spending was considerably greater for those at the higher end of the income scale, both in absolute terms and as a proportion of their spending.

Figure 11 breaks down the changes in spending for the first and fifth income quintiles and shows that food and non-alcoholic drinks had a positive contribution to the total change in household spending. Increased spending on food and non-alcoholic drinks had a larger impact on expenditure in the first income quintile households as these spent proportionally more in this area pre-pandemic. The fifth quintile saw larger negative contributions in their expenditure on transport, recreation and culture, and restaurants and hotels, the latter two being mainly discretionary.

Figure 11: Higher income households saw the largest spending drops on non-essentials such as restaurants

Contribution to change in weekly household expenditure (%), by spending category and income quintile, UK, financial year ending 2021

Download the data

.xlsx

For housing, fuel and power, those in the first income quintile spent a lower proportion than in the previous year, while those in the fifth income quintile spent a higher proportion. This likely reflects a combination of factors including price movements (with energy prices falling in April 2020, and private rents rising) and changes to their total expenditure, meaning that a relatively fixed spend could account for a higher proportion of a smaller amount of total spending. Households may also have consumed more energy as people moved to working from home, which may have been particularly the case for those with higher incomes.

Recent data from the Opinions and Lifestyle Survey shows that consumers have noticed increases in prices for some non-discretionary goods. 87% of people reported an increase in the cost of their food shopping, 77% reported an increase in energy bills and 76% reported an increase in the cost of motor fuels.

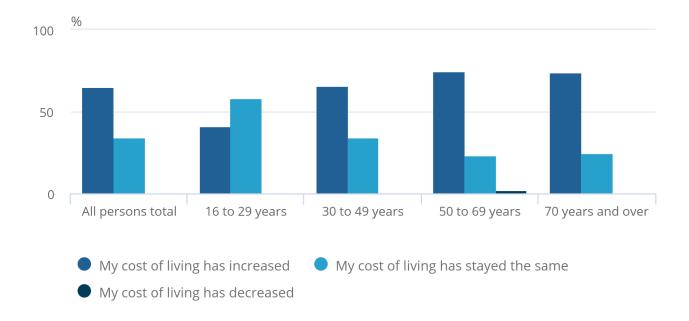
Overall, 65% of those surveyed said that their cost of living had increased in the previous month, with only 16- to 29-year-olds reporting in the majority that their cost of living had stayed the same.

Figure 12: Changes in the cost of living over the last month

Great Britain,18 to 28 November 2021

Figure 12: Changes in the cost of living over the last month

Great Britain, 18 to 28 November 2021



Source: Opinions and Lifestyle Survey (COVID-19 module), 18 to 28 November 2021

6. Inflation rates for discretionary and non-discretionary spending data

Discretionary and non-discretionary Consumer Price Indices (CPI)

Dataset | Released 15 December 2021

Consumer Price Indices (CPI) data for discretionary and non-discretionary spending inflation in the UK.

Consumer price inflation tables

Dataset | Released 15 December 2021

Measures of monthly UK inflation data including CPIH, CPI and RPI. These tables complement the consumer price inflation time series dataset.

Family spending workbook 2: expenditure by income

Dataset | Released 16 March 2021

Data are shown by region, age, income (including equivalised) group (deciles and quintiles), economic status, socio-economic class, housing tenure, output area classification, urban and rural areas (Great Britain only), place of purchase and household composition.

7. Data sources and quality

This analysis builds on work done by the Australian Bureau of Statistics (ABS) to estimate inflation for discretionary and non-discretionary spending. For the most part we allocated the same items to these categories but in some cases, we made changes to account for differences in our respective baskets or the way items were grouped. The full breakdown of the categories is in the Classification of discretionary and non-discretionary spending subsection.

In some cases, the categories used by the ABS do not exactly correspond to those used by the ONS. For example, the ABS use "Bread", "Breakfast cereals" and "Other cereal products" (all non-discretionary) and "Cakes and biscuits" (discretionary). According to the Office for National Statistics (ONS) classification, all of these fall under "Bread and cereals". To account for this, two new aggregates have been created to allow cakes and biscuits to be classified as discretionary, while the rest of bread and cereals is considered non-discretionary. Similarly, the UK's "Sugar, jam, syrups, chocolate and confectionary" has been split into "jams, honey and spreads" (non-discretionary) and "Chocolate and confectionary" (discretionary), in keeping with the ABS approach.

Another difference is rail transport – in the ABS, categorisation Urban Transport Fares are included as non-discretionary spending and the same is true for most rail fares in the ONS sample. However, we have separated out Eurotunnel fares to be classified as discretionary.

The ABS analysis also split spending further to separate out tobacco from discretionary spending as it has a particularly high growth rate that might otherwise skew the results. This is not the case for the UK and, after looking into this option, we concluded that there was no particular benefit in removing tobacco from our growth rate for discretionary spending.

Classification of discretionary and non-discretionary spending

01 - Food and non-alcoholic beverages

Non-discretionary spending includes:

- bread, breakfast cereals and other cereal products (excluding cakes and biscuits)
 beef, veal, pork, lamb, goat, poultry and other meats
 fish and other seafood
- milk, cheese and eggs
- oils and fats
- fruit
- vegetables
- jams, honey and spreads (excluding chocolate, confectionery and Ice-cream)
- · food additives and condiments and other food NEC
- coffee, tea and cocoa

Discretionary spending includes:

- · cakes and biscuits
- chocolate, confectionery, Ice cream and other dairy products
- · waters, soft drinks and juices

02 - Alcohol and tobacco

Discretionary spending includes:

- spirits
- wine
- beer
- tobacco

03 - Clothing

Discretionary spending includes:

- · garments for men
- garments for women
- · garments for infants and children
- footwear for men
- footwear for women
- footwear for infants and children
- accessories
- · cleaning, repair and hire of clothing and footwear

04 - Housing and household services

Non-discretionary spending includes:

- rent
- new dwelling purchase by owner-occupiers
- · maintenance and repair of the dwelling
- water and sewerage
- electricity, gas and other household fuels
- property rates and charges

05 – Furniture and household goods

Non-discretionary spending includes:

- repair of household appliances
- cleaning and maintenance products and other non-durable household products

Discretionary spending includes:

- furniture
- · carpets and other floor coverings
- household textiles
- major household appliances
- small electric household appliances
- glassware, tableware and household utensils
- tools and equipment for house and garden
- other household services

06 - Health

Non-discretionary spending includes:

- pharmaceutical products
- therapeutic appliances and equipment
- · medical and hospital services
- · dental services
- · hospital services

07 - Transport

Non-discretionary spending includes:

- · spare parts and accessories for motor vehicles
- automotive fuel
- maintenance and repair of motor vehicles
- other services in respect of motor vehicles
- rail fares (Excluding Eurotunnel fares)
- road transport (including removals)

Discretionary spending includes:

- motor vehicles
- · Eurotunnel fares
- air fares
- sea fares

08 - Communication

Non-discretionary spending includes:

- postal services
- telecommunication equipment and services

09 - Recreation and culture

Non-discretionary spending includes:

· pets, related products (pet food), veterinary and other services for pets

Discretionary spending includes:

- · audio, visual and computing equipment
- · audio, visual and computing media and services
- major durables for in/outdoor recreation
- games, toys and hobbies
- equipment for sports, camping and open-air recreation
- · gardens, plants and flowers
- sports participation
- other recreational, sporting and cultural services
- books
- · newspapers, magazines and stationery
- international holiday travel and accommodation
- · cultural services

10 - Education

Non-discretionary spending includes:

• preschool, primary education and secondary education (excluding tertiary education)

Discretionary spending includes:

tertiary education

11 - Restaurants and hotels

Non-discretionary spending includes:

canteens

Discretionary spending includes:

- restaurant meals
- takeaway and fast foods
- domestic holiday travel and accommodation

12 - Miscellaneous goods and services

Non-discretionary spending includes:

- personal care products
- childcare
- insurance
- deposit, loan facilities (direct charges) and other financial services
- other services

Discretionary spending includes:

- hairdressing and personal grooming services
- jewellery, clocks and watches
- · other personal effects

8. Related links

Measuring Non-discretionary and Discretionary Inflation – Australian Bureau of Statistics

Article | Released May 2021

Uses CPI data to produce measures of Non-discretionary and Discretionary inflation.