

Article

Consumer price inflation, historical estimates and recent trends, UK: 1950 to 2022

Analysis of the Consumer Prices Index including owner occupier's housing costs, extending back to 1950, incorporating the historical modelled estimates, 1988 to 2004.

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Next release: To be announced

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1. Main points

- The average 12-month growth rate of the Consumer Prices Index including owner occupiers' housing costs (CPIH) between 1950 and 1988 was 5.8%; considerably higher than the average of 2.6% between 1989 and April 2022.
- The average 12-month growth rate of the Consumer Prices Index (CPI) between 1950 and 1988 was 6.4%, while the average between 1989 and April 2022 was 2.5%.
- Food and non-alcoholic beverages were the biggest drivers of inflation for most of the period between 1950 and the late 1970s, while it also had the biggest weight of any division.
- Between 1989 and 2022, housing and household services was typically a bigger driver of inflation than food and non-alcoholic beverages.
- Oil price shocks in 1973 and 1979 contributed to exceptionally high inflation rates.
- Price growth for alcohol and tobacco rose sharply in the mid-1970s and remained elevated for much of the period until the mid-1980s.

2. Changes in Consumer Prices Index including owner occupiers' housing costs from 1950

The <u>Consumer Prices Index including owner occupiers' housing costs (CPIH) back series</u> provides a modelled series for consumer price inflation between 1950 and 1988. This complements the <u>existing official statistic modelled data between 1989 and 2005</u>, and the National Statistic series from 2006 onwards. The 1950 to 1988 estimates are purely indicative and are provided for analytical purposes. Care should be taken not to over-interpret the accuracy of the data given the uncertainty involved in extrapolating the series so far back in time. It may be misleading to focus on single timepoint estimates, therefore the analysis in this article focuses on the broader trends observed in the series over time.

The average 12-month growth rate of CPIH between 1950 and 1988 was 5.8%, with a wide variation in growth between the lows of the late 1950s and the highs of the mid-1970s.

Inflation was relatively stable at the beginning of the period, with upward pressure coming largely from food and non-alcoholic beverages. This was by far the biggest division, accounting for over one-third of the total weight in the basket until 1962. Inflation then increased rapidly during the 1970s, by which time housing and household services (including gas and electricity) had risen considerably in weight, before falling back to around 5% again in the late 1980s.

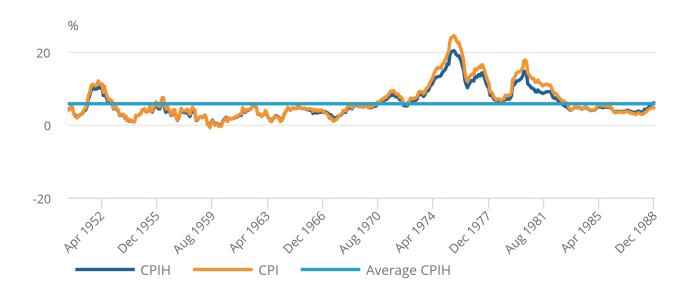
Between January 1989 and April 2022, official estimates show that the average 12-month inflation rate for CPIH was considerably lower, at 2.6%. More recently, however, the 12-month growth rate of CPIH has risen sharply again, from 0.7% in February 2021 to 7.8% in April 2022.

Figure 1: Inflation rose sharply in the 1970s before falling back in the 1980s

Newly modelled CPIH and remodelled CPI, UK, 1950 to 1988, 12-month growth rate, %

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Newly modelled CPIH and remodelled CPI, UK, 1950 to 1988, 12-month growth rate, %



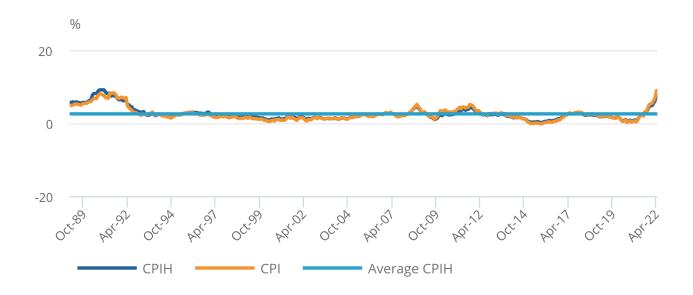
Source: Office for National Statistics - Consumer price inflation

Figure 2: Inflation has typically been lower since 1989 than between 1950 and 1988

CPIH and CPI, UK, January 1989 to April 2022, 12-month growth rate, %

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CPIH and CPI, UK, January 1989 to April 2022, 12-month growth rate, %



Source: Office for National Statistics – Consumer price inflation

Inflation began to steadily increase from the early 1970s, with the estimates from the CPIH model rising by approximately 16 percentage points between early 1970 and late 1975. This was also a period of considerable volatility with inflation falls in 1976 and 1977 followed by other sharp rises. By the mid-1980s inflation had stabilised at around 5% annual growth, considerably below the peaks of the 1970s.

These trends are broadly consistent with <u>inflation seen in the US at the time</u>, which also saw inflation spikes in the mid-1970s and early 1980s. This partly reflects global economic factors, such as oil crises and increased commodity prices.

3. Contributions to the 12-month growth rate of the Consumer Prices Index including owner occupiers' housing costs

Through much of the period between 1950 and 1988, the biggest driver of inflation was food and non-alcoholic beverages, which accounted for over one-third of the total basket by weight. At the peak of the 12-month growth rate in the modelled series in mid-1952, food and non-alcoholic beverages accounted for around three-quarters of annual inflation in each month.

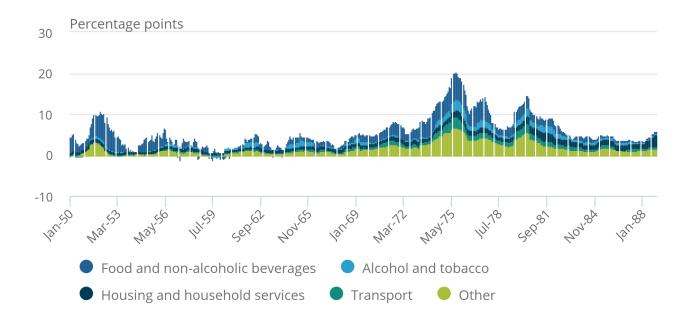
Subsequently, food and non-alcoholic beverages played a considerable role in driving rising inflation in the 1970s, alongside broader inflationary pressures, with all divisions putting upward pressure on the 12-month growth rate in the first half of the 1970s. This compares with much lower contributions from food and non-alcoholic beverages from 1978 onwards.

Figure 3: Food and non-alcoholic beverages drove inflation through much of the 1950s and 1970s

Contributions to the 12-month growth rate of CPIH modelled series, UK, 1950 to 1988, percentage points

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Contributions to the 12-month growth rate of CPIH modelled series, UK, 1950 to 1988, percentage points



Source: Office for National Statistics - Consumer price inflation

Notes:

1. The category "other" includes clothing and footwear, furniture and household goods, health, communication, recreation and culture, education, restaurants and hotels, and miscellaneous goods and services.

Figure 4: Housing and household services have been the biggest driver of inflation through most of the period since 1989

Contributions to the 12-month growth rate of CPIH, UK, 1989 to April 2022, percentage points

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Contributions to the 12-month growth rate of CPIH, UK, 1989 to April 2022, percentage points



Source: Office for National Statistics - Consumer price inflation

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1. The category "other" includes clothing and footwear, furniture and household goods, health, communication, recreation and culture, education, restaurants and hotels, and miscellaneous goods and services.

Since 1989, the biggest driver of Consumer Prices Index including owner occupiers' housing costs (CPIH) growth has typically been housing and household services, which includes gas and electricity prices. At its peak in December 1990, housing and household services was contributing 4.26 percentage points to the 9.2% 12-month growth rate of CPIH. This reflected high price growth for gas (9%), electricity (9.1%) and owner occupiers' housing costs (12%).

In 2022, inflation has once again been broad based, with all divisions of CPIH making positive contributions to the 12-month rate since August 2021. Oil price shocks and world prices for food are also contributing to inflationary pressures.

4. Changing economic conditions

A range of economic changes took place in the 1970s and 1980s, including the oil crises of 1973 and 1979 and several exchange rate shocks, which put strong upward pressure on inflation at the time.

The increase in contributions from food and non-alcoholic beverages in the 1970s coincides with a period of sharp increases in world prices for food and other commodities. This has been attributed in part to a sudden increase in demand for grains and oilseeds, as the Soviet Union and other centrally planned economies increased grain imports. This also coincided with the ending of the Bretton Woods system of fixed exchange rates and a depreciation of Sterling.

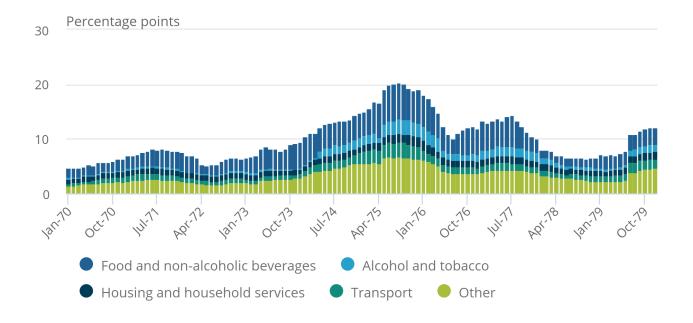
Between January 1970 and December 1979, the modelled average 12-month growth rate for food and non-alcoholic beverages is estimated to have been 14.6% (CPIH). Such sustained high inflation meant that over the course of the decade, food and non-alcoholic beverage prices had risen by around 300%.

Figure 5: Inflation became more broad based in the 1970s

Contributions to the 12-month growth rate of CPIH modelled series, UK, January 1970 to December 1979, percentage points

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Contributions to the 12-month growth rate of CPIH modelled series, UK, January 1970 to December 1979, percentage points



Source: Office for National Statistics - Consumer price inflation

Notes:

1. The category "other" includes clothing and footwear, furniture and household goods, health, communication, recreation and culture, education, restaurants and hotels, and miscellaneous goods and services.

Figure 6 shows the 12-month growth rate of crude oil prices alongside the 12-month growth rate of the Consumer Prices Index including owner occupiers' housing costs (CPIH), between 1961 and 1988.

The 12-month growth rate of crude oil prices almost tripled in a month, from 44% in September 1973 to 119% in October 1973. This followed the invasion of Israel on 6 October 1973, known as the Yom Kippur War. Price growth increased again from 119% to 525% from December 1973 to January 1974.

The modelled data suggest that the peak in CPIH followed later, which is consistent with trends seen more recently as oil price shocks take time to feed through to the wider economy. It likely also reflects measures taken by the government to combat the impact of oil shortages and high prices, including the rationing of petrol, a reduction in oil supplies to power stations, a reduction in the speed limit and voluntary restrictions on domestic heating. At the end of 1973, the Cabinet announced a state of emergency and decided on a three-day week in certain industries.

A second oil shock in 1979 followed the Iranian Revolution, after which Iranian oil output declined by 4.8 million barrels (7% of world production), causing uncertainty in the market and price increases.

Figure 6: Inflation spikes in the mid-1970s and early 1980s were preceded by oil price shocks

12-month growth rates of crude oil prices and the 12-month growth rate of modelled CPIH, UK, January 1961 to December 1988, %

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The drop-off in 12-month growth rates for crude oil prices largely reflects base effects as prices were being compared with the already elevated prices following the oil shock occurring from late 1973 to early 1974. Figure 7 shows the barrel price for crude oil between January 1960 and December 1988, showing that prices fell back only slightly in mid-1974, with prices in July 1974 still almost four times their pre-shock peak of 27 dollars per barrel (in September 1973).

Having remained relatively high, prices rose even more sharply between December 1978 and November 1979 in the wake of the Iranian Revolution, peaking at over 40 dollars per barrel in November 1979.

Figure 7: Barrel prices for oil rose suddenly in October 1973 and December 1978

Crude oil prices, nominal US dollars per barrel, January 1960 to December 1988

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Crude oil prices, nominal US dollars per barrel, January 1960 to December 1988



Source: World Bank - Commodity prices

Oil prices fell back only gradually during the 1980s and, even after a steep decline in early 1986, they remained much higher than they had been in 1973. These trends were global, rather than specific to the UK, but may have been compounded by the <u>depreciation of Sterling against the US Dollar in the mid-1970s</u>.

5. Alcohol and tobacco

Alcohol and tobacco saw a notable increase in its contribution to the 12-month growth rate of the Consumer Prices Index including owner occupiers' housing costs in the mid-1970s.

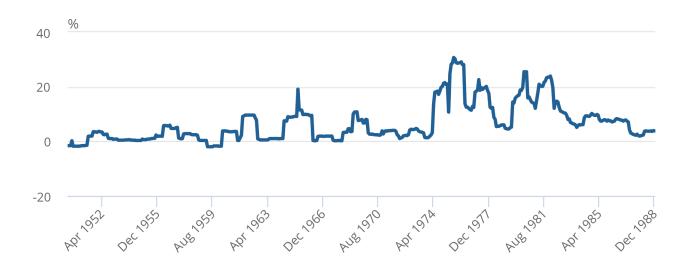
It is not possible, with the current data, to separate out the individual price movements of alcohol or tobacco from the combined category but price growth in the 1970s coincides with a period of change, most notably for the tobacco industry.

Figure 8: Price growth for alcohol and tobacco rose sharply in the mid-1970s

12-month growth rate of alcohol and tobacco prices

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12-month growth rate of alcohol and tobacco prices



Source: Office for National Statistics – Consumer price inflation

<u>Duty on wine also increased sharply between 1973 and 1977</u>, before falling back in the 1980s and remaining relatively stable since.

6. Insights from new estimates

New estimates of consumer prices including owner occupiers' housing costs growth between 1950 and 1988 give us insights into how the economy, and society, have changed in the years since World War 2. From direct government intervention in the form of rationing immediately post-war and measures to curb the health impacts of smoking in the 1970s, to global socio-political shocks and the rise of technology, much has changed over the last 70 years, but some of the factors driving inflation, such as oil prices and food and non-alcoholic beverages, remain just as relevant in 2022.

7. Related links

Consumer price inflation, historical estimates, UK 1950 to 1988 - Methodology

Article | Released 18 May 2022

A historical series of our lead measure of inflation, the Consumer Prices Index including owner occupier's housing costs (CPIH), which extends the series back to 1950 and incorporates the previously published historical modelled estimates for 1988 to 2004. Definitive historic division level indices for both CPI and CPIH from 1950 to 2004 are available.

Consumer price inflation, UK

Bulletin | Released 18 May 2022

Price indices, percentage changes, and weights for the different measures of consumer price inflation.

Consumer price inflation time series

Dataset | Released 18 May 2022

Comprehensive database of time series covering measures of inflation data for the UK including CPIH, CPI and RPI.

Consumer Prices Index including owner occupiers' Housing costs (CPIH) historical series: 1988 to 2004

Article | Released 14 December 2018

A historical series of our lead measure of inflation, the Consumer Prices Index including owner occupiers' housing costs (CPIH), which extends the series back to 1988. Historic class-level indices for both CPI and CPIH are available for the first time. Data in this release are not National Statistics.

Consumer Prices Index including owner occupiers' housing costs (CPIH) historical series

Dataset | Released 14 December 2018

Historical class-level data for the Consumer Prices Index including owner occupiers' housing costs (CPIH), which extend the series back to 1988. Index values for 1988 to 2004, and annual growth rates for 1989 to 2005 are provided for indicative purposes only and do not form part of the National Statistic series.

Modelling a back series for the Consumer Prices Index, 1950 - 2011

Article | Released 31 July 2014

This paper describes a method used to produce a modelled back series for CPI growth rates covering the period 1950 to 1988. The difference between the RPI and the CPI is modelled back through time via using an ARIMA model and other available data. Series included in the approach include the 12 two-digit CPI categories and the all-items series.

Consumer Prices Index back series, 1950 - 2013

Dataset | Released 31 July 2014

This file contains index numbers, month on previous month growths and month on same month in the previous year growths, labelled as 12-month growth, for the modelled CPI at the COICOP 12 and all-items levels. The back series, covering 1950 to 1988, has been linked to the official series for the period from 1989 to 2013 to provide a continuous, long-run set of consumer prices index numbers.

The Harmonised Index of Consumer Prices: historical estimates

Article | Released December 1998

The UK HICP was first published in February 1997: the index started in January 1996 and the first 12-month inflation figures were for January 1997. The Office for National Statistics constructed estimates of the UK HICP back to 1988. This article presents these estimates and explains how they were derived.