

Witness Name: Grant Fitzner

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UK COVID-19 INQUIRY

WITNESS STATEMENT OF GRANT FITZNER

I, Grant Fitzner, Chief Economist and Director, Macroeconomic and Environment Statistics and Analysis at the Office for National Statistics, will say as follows:

Contents

Background	2
Role and responsibilities.....	2
Key officials.....	3
ONS during the pandemic.....	3
Data required to estimate inflation	9
Consumer price inflation.....	9
Housing market inflation.....	11
Business price inflation	12
Average Weekly Earnings.....	12
Additional outputs during the pandemic.....	13
Potential limitations	15
Overall conclusions	16
April 2021- February 2022.....	16
Requests for data or analysis on inflation from stakeholders.....	17
April 2021- February 2022.....	18
Other economic indicators.....	20

Background

Role and responsibilities

1. The UK Statistics Authority (the Authority) is an independent statutory body established under the Statistics and Registration Service Act 2007 ('the 2007 Act'). It operates at arm's length from government as a non-ministerial department and reports directly to the UK Parliament, the Scottish Parliament, the Welsh Parliament and the Northern Ireland Assembly.
2. The 2007 Act established the Statistics Board as a body corporate (see section 1(1)). The 2007 Act also provided that there should be a National Statistician appointed by the Crown as an officer of the Board (see section 5). The National Statistician is the Chief Executive of the Board (see section 31).
3. Following Sir Robert Devereux's review of the Office for National Statistics (ONS) (published June 2025) (GF1/01) [INQ000657599], a new Permanent Secretary for the ONS was appointed in August 2025 to lead the day-to-day operations of the department, alongside the National Statistician.
4. The Board has adopted standing orders ('the standing orders'). The standing orders explain (at ¶1) that:

The Act created a 'Statistics Board' but by resolution at its first meeting on 2 February 2008 the Board agreed that it would operate under the name of the 'UK Statistics Authority'.

5. The 2007 Act sets out the Authority's objective as promoting and safeguarding the production and publication of official statistics that serve the public good (see section 7 (1)).
6. The Authority has several responsibilities. These are described as follows (at ¶3 of the standing orders):

The Authority provides professional oversight of the Government Statistical Service (GSS) and has exclusive responsibility for the Office for National Statistics, and for independent regulation.

7. In practice, the ONS operates as the Authority's statistical production function and is part of the GSS. The ONS is the UK's internationally recognised National Statistical Institute and largest producer of official statistics in the UK. The ONS is responsible for collecting and publishing statistics related to the economy, population and society at national, regional and local levels. It is the work of the ONS that I will, unless stated otherwise, be referring to in this statement.

8. The Office for Statistics Regulation (OSR) is the regulatory arm of the Authority and provides independent regulation of all official statistics produced in the UK.
9. The GSS is a network of all those involved in the production of official statistics in the UK. Official statistics are defined as those produced by organisations named in the 2007 Act or in the Official Statistics Order (SI 878 of 2023). Every public body with a significant GSS presence, such as those involved in the production or use of official statistics, has its own designated Head of Profession for Statistics. The GSS is part of the cross-government Analysis Function, which is a community of analysts across government. The National Statistician leads both the GSS and Analysis Function.
10. Official statistics are produced by statisticians operating under the umbrella of the GSS, working in either the ONS, UK government departments and agencies, or one of the three devolved governments in Northern Ireland, Scotland and Wales. Each of the devolved administrations has its own Chief Statistician. The Concordat on Statistics (GF1/02)[INQ000252611] sets out an agreed framework for statistical collaboration between the Authority, UK Government, and the Northern Ireland, Scottish and Welsh Governments.
11. An organisation chart of the Authority outlining how the ONS, OSR and the GSS relate to each other has been exhibited to the Inquiry (GF1/03)[INQ000252612].

Key officials

12. Since November 2018 I have been Chief Economist and Director for Macroeconomic and Environment Statistics and Analysis (MESA). I was also responsible for the initial co-ordination of the ONS's Coronavirus (Covid-19) response from March 2020 (before the implementation of longer-term arrangements).

ONS during the pandemic

13. As the UK's National Statistical Institute, the role of the ONS during the pandemic was to inform decision-makers and the public with regular data and analytical insights. We increased the level of insight that we provided within publications, such as mortality, to reflect the needs of our users (such as the public, media and decision-makers). For example, we linked these data to other sources, such as the Census to produce new insights on Covid-19 deaths for different characteristics such as ethnic group, disability and occupation.
14. Considerable work was undertaken to safeguard the quality and reliability of headline economic statistics and mitigate the impacts of the pandemic lockdowns; more details are set out below. Where there were significant data gaps or further insight was required, we introduced or adapted surveys at pace to rapidly inform policy decisions about the pandemic, including the impacts on business, households and wider society.

For example, we introduced the Business Insights and Conditions Survey (BICS), the Coronavirus Infection Survey (CIS), the Schools Infection Survey (SIS) and made changes to the Opinions and Lifestyle Survey (OPN).

15. We also safely procured and used new high frequency data sources such as financial transactions and mobility data to provide novel real-time data insights for decision-makers, working closely with the Civil Contingencies Secretariat in the Cabinet Office (and subsequently the COBR (Cabinet Office Briefing Rooms) Unit). Analysis was used widely across government and published where possible. For example, in April 2020, the Data Science Campus developed methods to aggregate data from global Community Mobility Reports published by Google. Making this data publicly available alongside the code used to extract it meant that users around the world could reuse the data to support their work (GF1/04)[INQ000590518], prompting Google to begin its own regular publication. We worked closely with government departments and the devolved administrations. We provided expertise and support to facilitate effective surveillance of the virus.

The role of the ONS in collecting and analysing inflation data

16. The ONS are responsible for the collection, analysis, and dissemination of statistics about the UK's economy, society and population.
17. Within the ONS, there is a Prices Division responsible for measuring the change in UK prices for consumers and businesses. On a monthly basis, this information is disseminated through various publications on the ONS website:
 - a. Consumer Price Inflation, UK
 - b. Private rent and house prices, UK
 - c. Producer price inflation, UK

We also publish quarterly Household Costs Indices for UK household groups.

18. Consumer price inflation statistics are the most widely used and recognised and serve a range of uses including uprating pensions and benefits and private contracts. The Consumer Prices Index (CPI) is the Bank of England's target for monetary policy, set by the UK Government. The ONS published an article in October 2016 which explains the users and uses of consumer price inflation statistics (GF1/05)[INQ000655854]. For example, uses include informing the public, inflation reporting or academic research and analysis and users include government departments, the Bank of England, the media and general public. As with all our statistics we also undertake continuous improvement work on prices data to ensure they remain fit for purpose.

19. The ONS's consumer prices transformation project seeks to identify new data sources (such as "scanner data", which are large datasets collated and owned by retailers as products are purchased, either online or in-store), improve methods and move to sustainable statistical production systems (GF1/06)[INQ000655855]. This allows us to improve quality, reflect our changing economy and produce more robust and granular inflation statistics.
20. This project was part of the Ambitious, Radical, Inclusive Economic Statistics (ARIES) programme which ran from 2022-23 through to 2024-25 and aimed to provide clear and insightful economic, social and environmental statistics and analysis to inform decision-making across the UK. The ARIES programme concluded in March 2025, after which the transformation and improvement work continued and has been formally overseen by Prices Division. This work forms part of the recently published ONS Economic Statistics Plan (GF1/07)[INQ000655882].
21. The ONS is supported in the production and development of consumer price inflation statistics by two advisory panels: the Technical Advisory Panel on Consumer Prices (APCP) (GF1/08)[INQ000655856], which offers independent guidance to the National Statistician on the technical aspects of consumer price indices, and the Stakeholder APCP (GF1/09)[INQ000655857], which advises on the practical uses and applications of these indices.

Differences over the pandemic

22. Estimates of CPI are based on a range of data sources, dependent on the component of the basket being measured. Approximately 50% of the CPI basket (by weight) is based on price quotes collected from outlets across the UK by a third-party contractor, Verian UK (formerly Kantar UK).
23. Movement restrictions imposed by the Government meant that this "local" price collection could not be carried out in the usual way during the pandemic. Full local price collection was suspended in April 2020 and not resumed until August 2020. We had to develop contingency plans for price collection at pace, drawing on expertise from across the international community.
24. The first key feature of contingency price collection was, where necessary, a move to increased collection from websites (if feasible) and by phone (GF1/10)[INQ000252695]. Particular consideration had to be given to the consistency of the sample over time, with the potential for a structural break in the series. The potential loss of regional variations in the sample was a further (unavoidable) drawback of this approach.

25. The second key feature was how to handle components of the CPI basket where lockdowns meant that consumers were unable to purchase them (for example, a haircut). Drawing on international guidance, we imputed the missing index in such a way as to minimise the impact on the headline inflation rate. Annex B of “*Coronavirus and the effect on UK prices*” lists the items that were unavailable in April 2020 (GF1/10)[INQ000252695].
26. The third key feature was how to update expenditure weights, an annual process in CPI statistics¹. Normally, the latest available consumer expenditure data (Household Final Consumption Expenditure, HFCE) is used, which reflects spending from 2 years prior to the reference year. Given the large changes in consumer spending patterns seen over the pandemic, we made adjustments to the source data for CPI and CPIH (Consumer Prices Index including owner occupiers’ housing costs) to reduce the lag to 1 year in 2021 and 2022 (and also in 2023). No adjustments were made for RPI, whose weights are based on survey data instead.
27. In order to implement these contingency plans we also consulted with the Bank of England at short notice on changing collection processes for the Retail Prices Index (RPI) (GF1/11)[INQ000655860], (GF1/12)[INQ000655861] (the annexes to these letters have been combined and published as part of the article at (GF1/10)[INQ000252695]. The consultation is a requirement under the 2007 Act and, under certain conditions, the Bank of England’s assessment may require us to seek consent from the Chancellor of the Exchequer to be made. This was not necessary in this instance.
28. More information on how procedures were adapted in response to the coronavirus pandemic can be found in the articles, “Coronavirus and the effect on UK prices” (GF1/10)[INQ000252695], “Resuming a field-based price collection” (GF1/13)[INQ000252696], and “Coronavirus and consumer price inflation weights and prices: 2021” (GF1/14)[INQ000252697].
29. The UK House Price Index was suspended in June and July 2020 as a result of the fall in the number of housing transactions and the need to adapt operational procedures as a result of movement restrictions. Provisional publications were resumed in August 2020, once the sample reached the minimum number of transactions to provide an acceptable level of confidence. The normal schedule was resumed in October 2020.

¹ The ‘weights’ used in the index refer to the relative importance assigned to different items or categories. For example, if households spend a larger portion of their budget on food than on clothing, food will be given a proportionally greater weight in the calculation of overall inflation.

30. The closure of workplaces and premises during the coronavirus pandemic led to the response rates for Producer Price Indices (PPI) and Services Producer Price Index (SPPI) surveys being lower than usual. Over this period, response rates were carefully monitored and statistical methods were used to deal with non-response.
31. In February 2022, we began supplementary work to analyse cost of living pressures in response to the post-pandemic rise in inflation. We published data on price changes for lowest-cost products and developed an online personal inflation calculator (with a shopping prices comparison tool delivered later in May 2023) (GF1/15)[INQ000655865]. We also published analysis on what inflation would have been if we had reweighed the consumer prices basket (described in paragraph 75) (GF1/16)[INQ000655878] and explaining how we measure the changing prices and costs faced by households (GF1/17)[INQ000655866].
32. In April and May 2022, the Royal Statistical Society (RSS) asked the National Statistician to expedite a regular publication of the Household Costs Indices (HCIs, described in paragraph 50) which had formerly been published experimentally on a loosely annual basis. The RSS have advocated for the development of these measures for many years and, given that the measures focus on the inflationary experience of different types of households, were of particular public interest over a period of increasing inflation. The first quarterly publication was delivered in December 2023.
33. The ONS published several economic articles about inflation in response to the pandemic. This includes an analysis of energy intensity of the CPI (GF1/18)[INQ000655867], a study of the main drivers of consumer prices (GF1/19)[INQ000655868], analysis of discretionary and non-discretionary spending (GF1/20)[INQ000655869], articles on international comparison (GF1/21)[INQ000655870], alternative measures of core inflation (GF1/22)[INQ000655871], and analysis of demand and supply factors in inflation (GF1/23)[INQ000655872].

Inflation in the UK economy during the pandemic

34. The ONS published a range of inflation datasets and statistics during the Inquiry's specified period including:
35. Consumer Price Inflation:
- a. Consumer price inflation tables (measures of monthly UK inflation data including CPIH, CPI and RPI. These tables complement the consumer price inflation time series dataset)

- b. Consumer price inflation time series (comprehensive database of time series covering measures of inflation data for the UK including CPIH, CPI and RPI)
 - c. Consumer price inflation detailed briefing note (the consumer price inflation detailed briefing note contains details of the items contributing to the changes in the CPIH (and RPI), details of any notable movements, a summary of the reconciliation of CPIH and RPI, and the outlook, which looks ahead to next month's release)
- 36. **Consumer price inflation item** (now "consumption segment") **indices and price quotes** (price quote data (for locally collected data only) and item indices that underpin consumer price inflation statistics, giving users access to the detailed data that are used in the construction of the UK's inflation figures. The data are made available for research purposes only and are not an accredited official statistic.)
- 37. **Contributions to the 12-month rate of CPI(H) by import intensity** (A longer time series of contributions to the Consumer Prices Index including owner occupiers' housing costs (CPIH) and Consumer Prices Index (CPI), UK, monthly.)
- 38. **Consumer price inflation, historical data, UK 1950 to 1988** (This spreadsheet contains data tables of historical estimates modelled for the Consumer Prices Index including owner occupiers' Housing costs (CPIH) and CPI over the period 1950 to 1988 (1949 to 1987 for index values) published alongside the Office for National Statistics' article Consumer price inflation, historical estimates, UK 1950 to 1988.)
- 39. **Private rental market summary statistics in England** (Median monthly rental prices for the private rental market in England by bedroom category, region and administrative area, calculated using data from the Valuation Office Agency and Office for National Statistics.)
- 40. **Index of Private Housing Rental Prices, UK: monthly estimates** (Rental price statistics by countries and regions historical data time series (indices and annual percentage change).
- 41. **House price data: annual and quarterly tables** (Annual and quarterly house price data by property characteristic, country and region, based on a sub-sample of the Regulated Mortgage Survey. An interactive tool is also published on the HM Land Registry website)
- 42. **House price statistics for small areas in England and Wales: year ending in March 2023** (House prices and number of transactions for property sales in England and Wales, on an annual basis, updated quarterly.)

43. **Producer Price Inflation** (including services from October 2020 onwards):
Changes in the prices of goods bought and sold by UK manufacturers including price indices of materials and fuels purchased (input prices) and factory gate prices (output prices).
44. **Service producer price inflation:** Quarterly estimates monitoring the changes in prices charged for services provided to UK-based customers for a range of industries. A new bulletin was introduced in October 2020, which collates information from the Services Producer Price Index (SPPI) and Producer Price Index (PPI) – Producer Price Inflation including Services, UK.
45. During this period, we also provided Purchasing Power Parities data to the European Comparison programme. The UK's data was included in Eurostat's annual calculations and publication, the latest publication that ONS contributed to can be found in the enclosed exhibit (GF1/24)[INQ000655859].

Data required to estimate inflation

46. The ONS's role is to produce statistics on the economy, society and population of the UK. It does not predict rates of inflation.
47. Inflation statistics are generally based on the principal in measuring the change in prices of a "fixed basket" of goods and/or services (GF1/25)[INQ000655873]. The composition and quantities of the basket are periodically reviewed to ensure that they remain relevant. Our inflation statistics cover three main domains: consumer prices, the housing market, and business prices and are used by stakeholders such as the Bank of England, HM Treasury and the public.

Consumer price inflation

48. Measures of consumer price inflation generally reflect the change over time in prices paid by consumers. A time series is enclosed in Figure 1. The measures we produce fit into three "use cases", described in the following paragraphs.
49. The Consumer Prices Index (CPI) and CPI including a measure of owner occupiers' Housing costs (CPIH) reflect the change in the prices of consumer goods and services paid by households within the UK, measured according to recognised economic principles. The CPI is based on Eurostat's methodology for the Harmonised Index of Consumer Prices (the HICP, a measure of inflation produced by EU member states and some other countries, most notably the USA) and, as such, is an internationally comparable measure of consumer price inflation. It is also the current inflation target for monetary policy, as defined by the UK Government and tends to be the focus of media commentary. However, the HICP framework does not include a

measure of owner occupiers' housing costs, which is a significant expense for many households. The CPIH, introduced following the 2015 UK Consumer Price Statistics independent review by Paul Johnson (GF1/26)[INQ000655862] builds on the CPI framework to include such a measure (using rental prices as a proxy for housing services), as well as additionally incorporating Council Tax (GF1/27)[INQ000655874]. It should be noted that owner occupiers' housing costs are distinct from house prices, since the purchase of a house reflects both the acquisition of an asset, as well as giving the owner occupier access to housing services. Consumer price inflation measures aim to capture the latter.

50. The Household Costs Indices (HCIs) are measures of how households in the UK experience changes in prices and costs, with a focus on different subgroups of the population, such as different income bands and tenure types; whilst recognised as a component of the consumer prices landscape in 2020 (GF1/27)[INQ000655874], the regular quarterly publication didn't begin until December 2023. Key differences from the CPI and CPIH are a different approach to weighting the basket (they use the average households share of expenditure rather than the share of total expenditure in the UK), and a different approach to measuring owner occupiers' housing costs (through mortgage interest and other payments for housing).
51. The Retail Prices Index (RPI) is a legacy measure of inflation, which we are legally required (under section 21 of the Statistics and Registration Services Act 2007) to compile, maintain, and publish every month. The RPI is not a good measure of inflation and is not consistent with international best practice, due to its use of an outdated formula (GF1/28)[INQ000655875], (GF1/29)[INQ000655876]. Our policy is to reform RPI at the earliest opportunity, by bringing in the methods and data sources of CPIH. The earliest that this can legally and practically happen is in 2030.
52. CPI and CPIH are accredited official statistics, referred to as National Statistics in the 2007 Act, and, along with RPI (which is not), data are published every month at a one-month lag. The HCIs are official statistics in development and monthly estimates are published on a quarterly basis at a two-month lag.
53. Numerous data sources underpin the measurement of consumer price inflation, depending on the component of the basket being measured. There are a few data sources with fairly broad usage across the basket.
54. The locally collected dataset covers about 50% of the CPI basket (by weight) and is outsourced to a third-party, currently Verian UK. Verian's collectors collect price data from a sample of outlets in 141 locations across the UK, on "index day", the second or

third Tuesday of every month (with some collection also happening on the days around index day).

55. Household Final Consumption Expenditure (HFCE) data is an ONS data source that estimates household expenditure within the UK; it draws on data from the Living Costs and Food survey (LCF) as well as a range of administrative sources, and is used to construct expenditure weights for higher-level aggregates for the majority of the CPI and CPIH basket
56. LCF is an ONS survey that captures household expenditure and is an input into HFCE data; it is based on a face-to-face survey of approximately 5,000 UK households (including a two-week “diary” of expenditure) and is the main source for RPI expenditure weights, as well as being used in the construction of lower-level weights for CPI and CPIH.

Housing market inflation

57. The UK House Prices Index is produced jointly with HM Land Registry and measures the change in value of residential properties based on residential housing transactions whether for cash or with a mortgage; house purchases are distinct from consumer prices because the acquisition of a house is the acquisition of an asset that is not consumed in the same way as other goods and services. The UK House Price Index was suspended from May 2020 and restarted in August 2020. This was due to limited transactions, the decision on when to reinstate the UK House Price Index was made by understanding the minimum number of transactions needed to provide an acceptable level of confidence in the data. Simulations ran on the UK House Price Index model showed approximately 12,000 transactions across England, Scotland and Wales would be an acceptable minimum level.
58. The UK HPI is published jointly with HM Land Registry, whose sales data are used to produce the measure; sales data cover UK residential housing transactions, whether for cash or with a mortgage; the UK HPI feeds into some of the owner occupier housing components in RPI.
59. The Index of Private Housing Rental Prices (IPHRP – now superseded by the improved Price Index of Private Rentals, PIPR) tracks the prices paid for renting property from private landlords in the UK; IPHRP (and PIPR) is used as the private rentals component of the consumer price inflation basket and also forms the basis of the measure of owner occupiers’ housing costs in CPIH
60. The Index of Private Housing Rental Prices (IPHRP) uses administrative data from several key bodies to measure rental price changes: the Valuation Office Agency (VOA) for England, the Welsh Government, the Scottish Government, and the Northern

Ireland Housing Executive (NIHE). Data for Northern Ireland also incorporates information from Propertynews.com. These sources collect rental data from letting agents and landlords, providing the ONS with the necessary information to construct the index.

61. UKHPI and PIPR (formerly IPHRP) are accredited official statistics and data are published on a monthly basis. PIPR is published at a one-month lag and UK-HPI is published at a two-month lag.

Business price inflation

62. The Producer Prices Index (PPI) captures changes in the prices of goods and services bought and sold by UK manufacturers: changes in input prices (materials and fuels purchased by UK manufacturers) and output ("factory gate") prices.
63. Price data for PPI are predominantly based on a statutory monthly survey of businesses, who are asked to provide price data for transactions that have occurred near to the first of each month, with some administrative data sourced from other Government departments and further data taken from published sources (GF1/30)[INQ000655877]. Information on weights is drawn from our UK Manufacturers' Sales by Product survey (PRODCOM).
64. The Services Producer Prices Index (SPPI) measures the quarterly change in prices charged for services provided to UK-based customers for a range of industries. SPPI is similarly based on a survey collection of price data and national accounts sales data.

Average Weekly Earnings

65. Average weekly earnings (AWE) is the lead monthly measure of average weekly earnings per employee. It is published monthly and is designed to capture changes in average earnings of employees in Great Britain (GB). The measure of AWE for any given month is the estimated total pay for the whole economy, divided by the estimated total number of employees.
66. AWE is calculated from returns to the Monthly Wages and Salaries Survey (MWSS) and is weighted to be representative of the GB economy as a whole. The self-employed, HM armed forces and government-supported trainees are excluded from the statistics.
67. AWE is published as a level of earnings, in pounds per employee per week. The level of AWE is then used to calculate annual rates of growth. Our headline estimate is the three-monthly growth rate, seasonally adjusted; that is, the percentage change between the three months ending in the given month and the corresponding three

months in the previous year. ONS commentary on the estimates focuses on the three monthly growth rate, which is less volatile than the single month growth rate.

68. During the pandemic period, interpreting average earnings data was difficult, mainly due to the impact of people being furloughed. We explained the complexities of interpreting these data in a blog: *How Covid-19 has impacted the Average Weekly Earnings data* (GF1/31)[INQ000655886]. There were temporary factors that we refer to as base and compositional effects and we provided users with additional analysis and commentary at the time to help understand these effects.

Compositional effects

69. The compositional effect is where pay growth has been affected by a changing composition of employee jobs. Changes in the profile of employee jobs in the economy will affect average pay growth. A decrease in employee numbers in jobs that have lower pay can have an upward effect on average pay, and the other way around.
70. Following the initial impact of the coronavirus pandemic, the change in pay growth was heavily affected by a changing composition of employee jobs, where we saw a fall in the number and proportion of lower-paid employee jobs. This changing composition increased the estimate of average pay.
71. We also published a separate article on the impact of compositional effects on wage growth, *How furlough and changes in the employee workforce have affected earnings growth during the coronavirus (Covid-19) pandemic, UK: 2020 to 2021* (GF1/32)[INQ000655887].

Base effects

72. The base effect refers to comparing two periods with different circumstances. Throughout the coronavirus (Covid-19) pandemic we have had differing scenarios that have impacted the base effect.
73. Initially many workers were on furlough or had their hours reduced. This meant that people saw their earnings fall, pushing down weekly wages. The following year, with fewer people on furlough and hours returning closer to normal, weekly wages were higher. This resulted in negative growth at the start of the pandemic followed by a higher growth rate the following year because some wages were falling the previous year. These base effects are common in statistics, but what makes them more pronounced in this period is the huge economic shock that the pandemic created.
74. Throughout and after the pandemic period in our monthly bulletin we provided additional commentary and analysis on the impact of base and compositional effects on wage growth. This provided users with an underlying rate of wage growth to consider

and discussed the pattern of pay growth affected by the proportion of employees who are furloughed, and the extent to which employees have topped up payments received for those employers under the Coronavirus Job Retention Scheme (CJRS).

Additional outputs during the pandemic

75. In May, August and November 2020 (GF1/33)[INQ000655889] (GF1/34)[INQ000655890] (GF1/35)[INQ000655891], and March 2021 (GF1/16)[INQ000655878], ONS published analysis on the effect of re-weighting the consumer prices inflation basket to account for changes in consumption patterns as a result of lockdowns. This analysis covered the period from April to December 2020 and was produced in response to stakeholder concerns that the expenditure weights used to construct the inflation rates did not reflect rapidly changing patterns of consumption, biasing estimates of inflation. However, the analysis suggested only a minor impact as a result of re-weighting (no more than 0.11 percentage points in magnitude when compared with a comparable variant of the official series).
76. In October 2020, ONS published analysis of how the Eat Out to Help Out scheme and reduction in Value Added Tax for restaurants affected movements in UK consumer price inflation for August 2020 (GF1/36)[INQ000655879]. This was produced in response to user interest in the impact of these schemes on the inflation rate. The analysis suggested that, had these not been in effect, the official CPIH annual inflation rate of 0.5% would in fact have been 0.9%.
77. A range of further relevant economic analysis was also published as part of the “Recent drivers of UK consumer price inflation” series, generally in response to topical matters. For example, comparing UK inflation rates with other countries and investigating the drivers of recent trends in consumer prices. A list of previous publications is enclosed (GF1/37)[INQ000655880].
78. In early 2022, a personal inflation calculator was published on the ONS website, allowing the user to input their own household expenditures to get a personalised inflation rate (GF1/38)[INQ000655888]. This was later embedded on the websites of news outlets such as BBC News and the Financial Times.
79. In May 2022, analysis of how the prices of the lowest-cost products for 30 everyday items changed between April 2021 and April 2022 was published, based on experimental web-scraped supermarket data (GF1/39)[INQ000655881]. The analysis was produced in response to public interest in the hypothesis that the cheapest available supermarket products were more likely to be discontinued, forcing poorer households to switch to more expensive replacements. This highly experimental research suggested that the prices of the 30 lowest-priced items chosen increased in

cost by around 17% in the 12 months to September 2022, compared with a 15% rise in the official inflation series for food and drink, although there was considerable variation across the items chosen.

80. Between April 2020 and April 2021, ONS published experimental web-scraped price indices for high-demand products in the “Coronavirus, the UK economy and society, faster indicators” publications. A rapid review of these data was carried out by the Office for Statistics Regulation (GF1/40)[INQ000092793].
81. In May 2022, ONS published an extended historical series for CPIH and CPI between 1950 and 1988, with accompanying historical analysis. This was developed in response to user need to understand the longer-term dynamics of CPI and CPIH, but the release was expedited given media interest in very high inflation rates at the time. In recent years, the CPI annual inflation rate peaked at 11.1% in October 2022. According to the indicative historical estimates, this would have been the highest CPI since 1980.

Potential limitations

82. Inflation datasets serve a wide range of practical, policy, and research functions. This includes economic analysis, fiscal and monetary policy decisions, pay negotiations, indexation of pensions and benefits, uprating of business contracts, legal settlements and financial instruments, rent and mortgage valuations, business planning, and cost of living comparisons.
83. The appropriateness of any inflation dataset will depend on the purpose of the analysis for which it is used. In general, the most frequently used inflation indices are datasets on consumer prices (CPI). The headline CPI rate is also used by the Government and the Bank of England as the official measure for the 2% inflation target.
84. Some financial instruments, such as UK government bonds that adjust for inflation, contracts that swap fixed and variable interest rates in pounds sterling, and certain private-sector agreements, still use the RPI to measure inflation as a matter of long-standing practice, even though RPI is no longer recognised as a reliable measure.
85. The breakdown by CPI component can tell us about the main drivers behind changes in the inflation rate. A common breakdown is to split inflation into energy, food, and so called “core” products. This can be done in many ways where the main goal is to distinguish between often volatile movements in food and energy prices versus longer term trends in the core inflation rate. Core inflation is thought to be more representative of underlying price pressures. It is also considered a better predictor of inflation, although it is often a lagging indicator as core prices tend to move more slowly in response to economic shocks.

86. Similar breakdowns can be used to study distinctions between domestic and imported inflation, the impact of supply and demand shocks, or to compare price trends across different countries, for example. Data on individual price quotes offer some information about competitive pressures, inflation dispersion, and the frequency of individual price changes.
87. Business prices and producer price indices (PPIs) are typically used to study 'pipeline' price pressures further down the supply chain. A typical example is food prices, including domestic farmgate prices and prices of imported food products. This can give some indication about the outlook for consumer prices of food products in the period ahead. PPIs for some durables such as white goods can be used for the same purpose, albeit with limited accuracy.
88. These relationships between PPI and CPI are often unstable both in terms of lags and the extent of the pass-through, as retailers can adjust their product offerings as well as their profit margins across the supply chain. This can be done for products undergoing economic shocks as well as items less affected, in an attempt to delay or smooth the impact of large disruptions.
89. The ONS is not responsible for predicting future inflation rates. Other organisations that engage in economic forecasting are better positioned to advise about such risks and the usefulness of any leading indicators to predict inflation. The risks of using more timely but less complete data will vary depending on context, situation, and purpose of any predictions. These risks might also change during exceptionally large shocks such as a global pandemic.

Overall conclusions

April 2021- February 2022

90. The annual rate of headline CPI inflation increased from 0.7% in March 2021 (published on 21 April) to 5.5% in January 2022 (published on 16 February). The unrevised annual rate of PPI inflation increased from 1.9% in March 2021 to 9.9% in January 2022. The PPI is typically more volatile than the CPI, so this wedge is not unusual. The PPI is reported as unrevised for this purpose as this is what was available at the time of publication.
91. The main driver behind this increase in inflation rates was the sharp rise in energy prices. Oil prices increased from around \$65 per barrel in April 2021 to over \$90 per barrel by the end of January 2022. Similarly, natural gas prices increased from about £0.50 per therm in April 2021 to around £3.50 per therm by the end the year.

92. The re-opening of previously inactive parts of the economy following the lifting of some Covid-19 restrictions while global supply chains remained constrained also contributed to upward price pressures. There were additional upward pressures on food prices too, as these depend to a great degree on energy. Moreover, Russia and Ukraine were important global suppliers of grains and fertilizer.
93. PPIs tend to be more exposed to energy prices and global supply chains than the CPI as the former mainly measures goods price inflation, including energy and non-energy goods. In contrast, the biggest share of CPI is accounted for by services prices that are more sensitive to wage growth and domestic labour market conditions.
94. The impact of higher energy price inflation on services prices mainly depends on second-round effects on inflation expectations and pay negotiations. While there is a separate index for service producer prices (SPPI), many services are sold directly to consumers and rely heavily on labour rather than energy inputs.
95. Energy prices are typically not considered as reliable leading indicators because they themselves are volatile. This makes it challenging to distinguish between permanent and temporary shocks.
96. Most economic forecasters tend to keep their forecasts largely agnostic about the energy price outlook for this reason, using some combination of oil and gas futures prices and/or unchanged price as their conditioning assumptions. As a result, this sharp increase in energy prices led to marked upward revisions to inflation forecasts.
97. The expected CPI inflation rate for Q4 2021 increased from 2.1% in April 2021 to 4.0% in the last survey prior to the release of the first monthly estimate within said quarter. This is based on the median estimate of new forecasts reported in the HMT Survey of Forecasts for the UK economy (GF1/41)[INQ000655884].
98. Second-round effects on wages and inflation expectations are another factor where assumptions and judgement were required to inform the likelihood of a sustained pickup in inflation rates. These are some of the reasons why both economists and markets initially underestimated the scope for inflation to increase, especially considering increased recession risk during the pandemic, and the period prior to Covid-19 where overall risks to inflation expectations were skewed to the downside for many years.
99. In summary, there were some indications that inflation risk was increasing following the initial rise in energy prices, and during the re-opening of the economy after Covid-19 restrictions were lifted. At the same time, it is not surprising that the scope for this increase was generally underappreciated given the complex nature of these successive and overlapping economic shocks, and the judgments and conditioning

assumptions about inherently unpredictable factors that would have been required to make an accurate prediction.

Requests for data or analysis on inflation from stakeholders

100. Social distancing policies and movement restrictions were brought into effect on 23 March 2020 as a result of the pandemic. Given the closure of many outlets across the country, we were unable to collect price data in the usual way (price quotes for the consumer prices sample are collected in outlets across the UK by a third party, Verian UK (paragraph 54)), and we therefore had to mitigate this loss of data, as described in more detail at paragraphs 22 to 27.

101. On 6 May 2020 we set out a clear contingency plan for data collection, compilation and publication of our various prices statistics (GF1/10)[INQ000252695]. To deliver this plan, transformation and continuous improvement resource was diverted to support the development of contingency solutions at pace. This was in place until the middle of 2021, although the most resource-intensive period was in the first few months of the pandemic. Transformation and continuous improvement resource was also diverted onto the development and production of supporting analysis over the pandemic period. This had the effect of delaying the consumer prices transformation project by one year (GF1/10)[INQ000252695].

102. Prices staff meet regularly with colleagues at the Bank of England and HM Treasury to discuss inflation-related topics. Much of the supporting analysis produced over the period in question (detailed under 'Additional outputs during the pandemic', from paragraph 75) were in response to questions and queries raised at these meetings. Bank of England and HM Treasury staff were also regularly briefed on contingency work and the impact of lockdowns on the price collection.

April 2021- February 2022

103. Through regular meetings, the Bank of England and HM Treasury asked a range of questions regarding our contingency plans including how we were dealing with Covid in terms of imputation (for example our treatment of house prices), and the number and weight of missing items. They also asked more generally about inflation-related topics; for example, understanding the drivers of changes in the rate. These questions were answered using published articles. We confirmed the methodology that we would be using to the Bank of England in a formal letter (GF1/11)[INQ000655860], (GF1/12)[INQ000655865] (the annexes to these letters have been combined and published as part of the article at (GF1/10)[INQ000252695]).

104. The ONS publishes most inflation statistics in the current month for the month before. This means that inflation statistics produced by the ONS between April 2021

and February 2022 would cover the reference periods between March 2021 and January 2022. This would include most of our monthly statistics on consumer prices, business prices, and house prices.

105. Some indices such as service producer prices (SPPI) and household cost indices (HCIs) are published once every quarter. SPPI publishes a quarterly estimate e.g. Q1 whereas the HCI publishes estimates of HCI inflation for three months at a time e.g. January, February and March.

106. The dates and times of ONS publications are made available in our release calendar. This is accessible to all external users including HM Treasury and the Bank of England. For convenience, the publication schedule for CPI and PPI over the requested period is available in Table 1.

Table 1: CPI and PPI publication schedule from April 2021 to February 2022

Reference period	Publication date	Annual rate of inflation (%)	
		CPI	PPI*
March 2021	Apr. 21, 2021	0.7	1.9
April 2021	May 19, 2021	1.5	3.9
May 2021	Jun. 16, 2021	2.1	4.6
June 2021	Jul. 14, 2021	2.5	4.3
July 2021	Aug. 18, 2021	2.0	4.9
August 2021	Sep. 15, 2021	3.2	5.9
September 2021	Oct. 20, 2021	3.1	6.7
October 2021	Nov. 17, 2021	4.2	8.0
November 2021	Dec. 15, 2021	5.1	9.1
December 2021	Jan. 19, 2022	5.4	9.3
January 2022	Feb. 16, 2022	5.5	9.9

Notes: Figures for PPI inflation are unrevised data for output prices as reported at the time of publication

Figure 1: CPIH, owner occupiers' housing (OOH) costs component and CPI annual inflation rates, UK, July 2015 to July 2025 (GF1/42)[INQ000655885]



Other economic indicators

107. Economic trends are highly interdependent; causality between different variables can often run in both directions. This means that the best analytical results are usually achieved by considering a combination of datasets.
108. Using different indicators of inflation helps, but these should be studied together with other economic variables, such as labour market indicators, the growth outlook, national accounts, public- and private-sector balance sheets, and other indicators of the economy and financial markets.
109. For example, an initial increase in inflation is more likely to become sustained in a tight labour market and if economic policy enables consecutive rounds of wage and price increases not otherwise offset by corresponding increases in productivity.
110. In a different macroeconomic environment, the same initial increase in inflation might instead weigh on household purchasing power, leading firms to reduce their profit margins and employment demand, causing a subsequent decline in economic output, and requiring a consolidation in public- and private-sector balance sheets. Taken together, with other factors being equal, this could lead to lower inflation than would have been the case in the medium-term.
- 111.** Therefore, any conclusions about the inflation outlook are highly contextual, and need to be taken together with other economic developments, both domestically and internationally.

Statement of Truth

I believe that the facts stated in this witness statement are true. I understand that proceedings may be brought against anyone who makes, or causes to be made, a false statement in a document verified by a statement of truth without an honest belief of its truth.

Signed:

Personal Data

Dated: 9 October 2025