# Inflation and recession: how bad, and how bad for gambling?

Date 23 June 2022

# The economic forecasts from HM Treasury and KPMG

| Forecast | | | |
|---|---|---|---|
| | 2021 | 2022 | **2023** |
| **GDP growth** | **7.5** | **3.8** | **1.8** |
| **CDP growth per capita** | **7.4** | **3.5** | **1.5** |
| **Main components of GDP** | | | |
| Household consumption[2] | 6.1 | 5.4 | 1.0 |
| General government consumption | 14.5 | 2.6 | 1.2 |
| **Consumer prices index (CPI) inflation** | **2.6** | **7.4** | **4.0** |

Source: H M Treasury.

| Table 14: KPMG forecasts for the UK | | | |
|---|---|---|---|
| | 2021 | 2022 | **2023** |
| **GDP** | **7.4** | **3.9** | **1.1** |
| **Inflation** | **2.6** | **7.9** | **4.1** |
| **Unemployment rate** | **4.5** | **3.9** | **4.3** |

Source: KPMG Global Economic Outlook:

**The government predicts slower growth this year than last, slowing again in 2023.**

**Inflation is expected to average 7.4% this year and fall back to 4% next.**

**KPMG is a bit gloomier about inflation this year and growth next year.**

**These forecasts are both close to the consensus.**

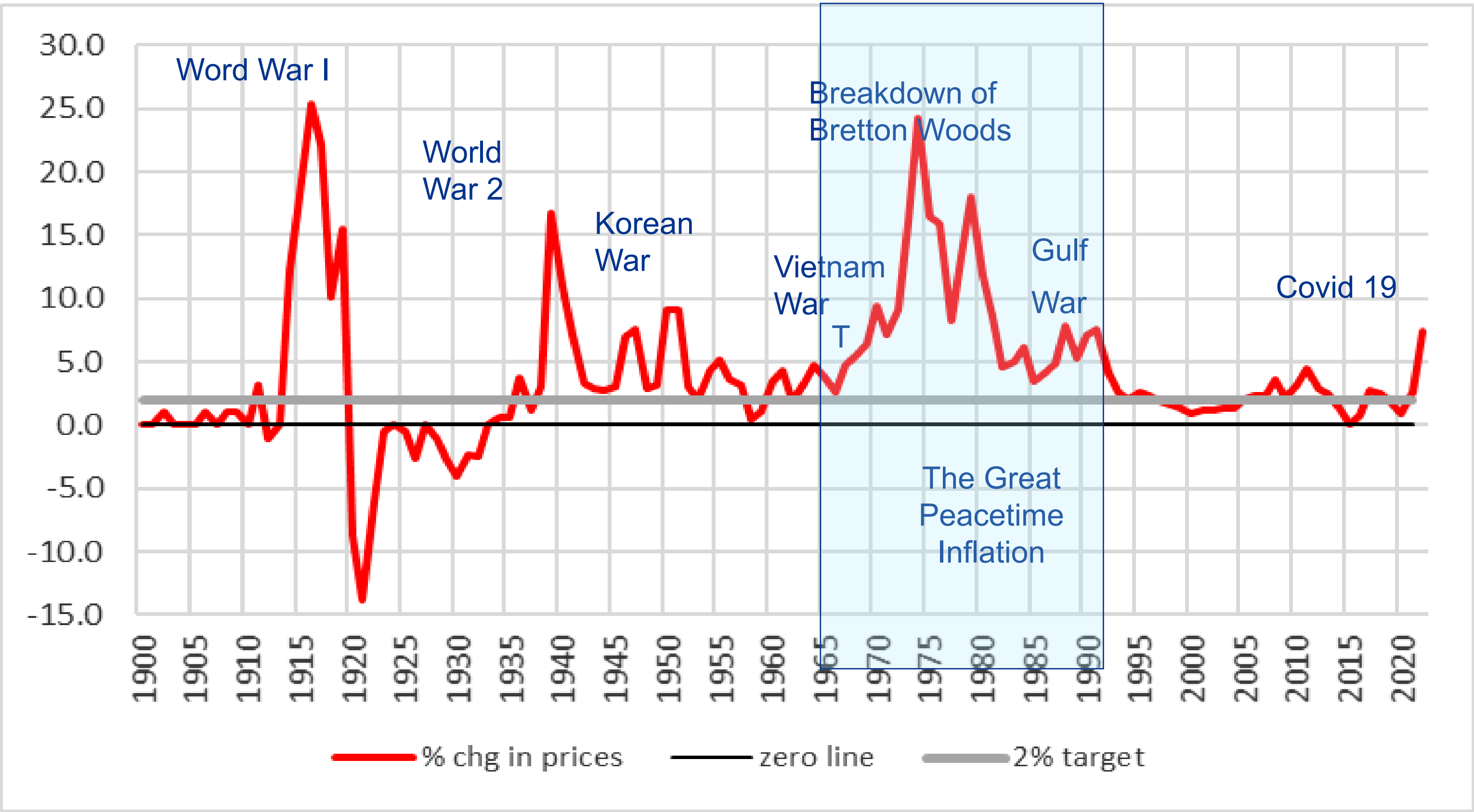
**But the consensus has been consistently wrong since inflation started to overshoot targets in May 2021**

**So here is an alternative scenario**

# Why inflation has been consistently worse than forecast

# Why inflation happens: caused by shocks, often linked to war

**UK Inflation since 1900**




Source: ONS RPI data until 1988 then CPI,. Official forecast for 2022 annual average

Each World War led to a massive expansion of public borrowing, leading to a rapid increase in the money supply.

Local wars have had a smaller, but visible, effect.

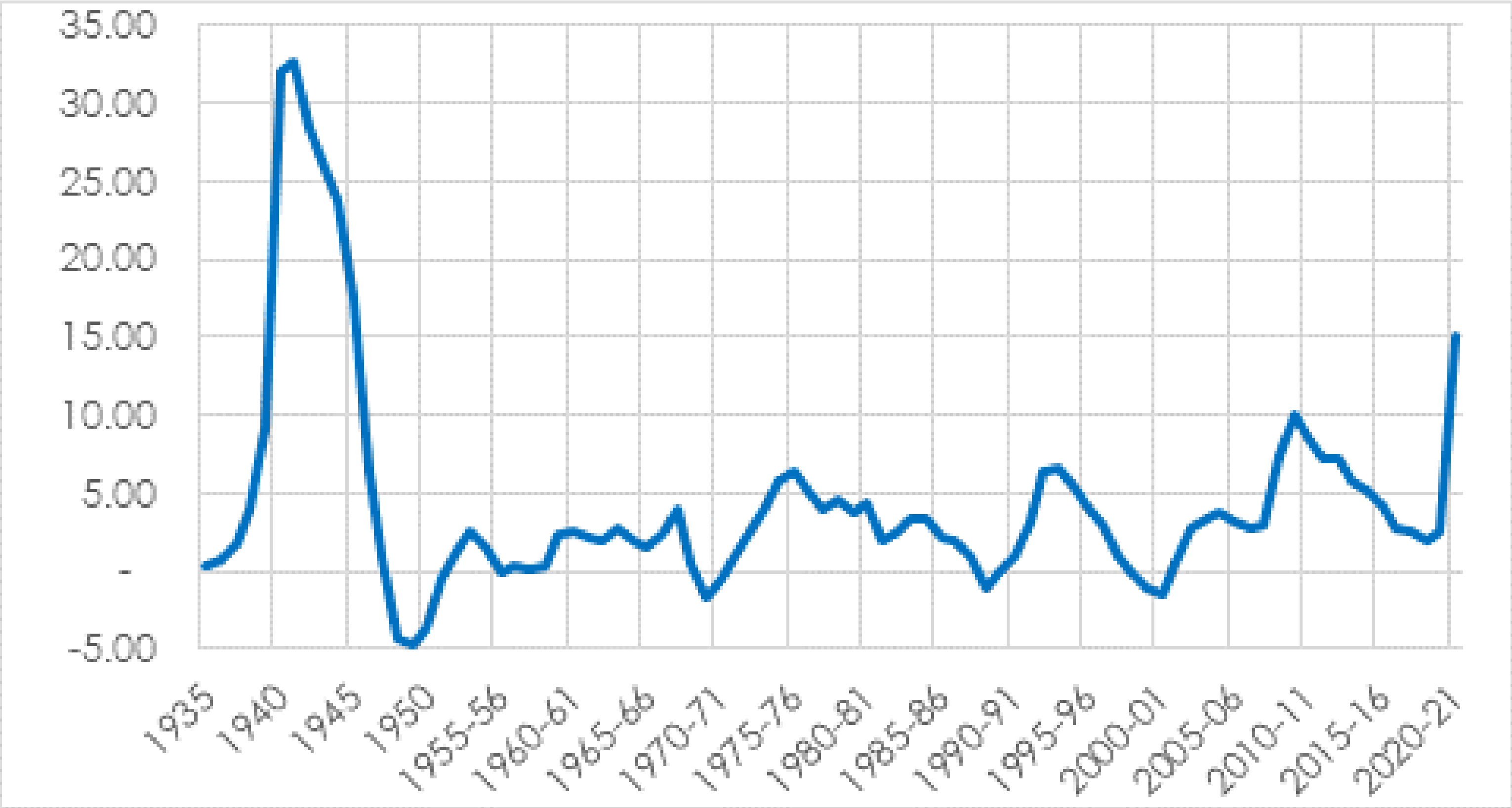
The breakdown of Bretton Woods was another shock

Every one of these shocks was global and led to high public borrowing, rapid monetary growth and inflation in many countries

Covid 19 is another global shock, set to have similar results.

# Covid created excess demand, just like mobilisation for war

**Public sector borrowing (% of GDP)**




Source: *Office for Budget Responsibility*

Paying people who are not producing consumable goods and services is inherently inflationary.

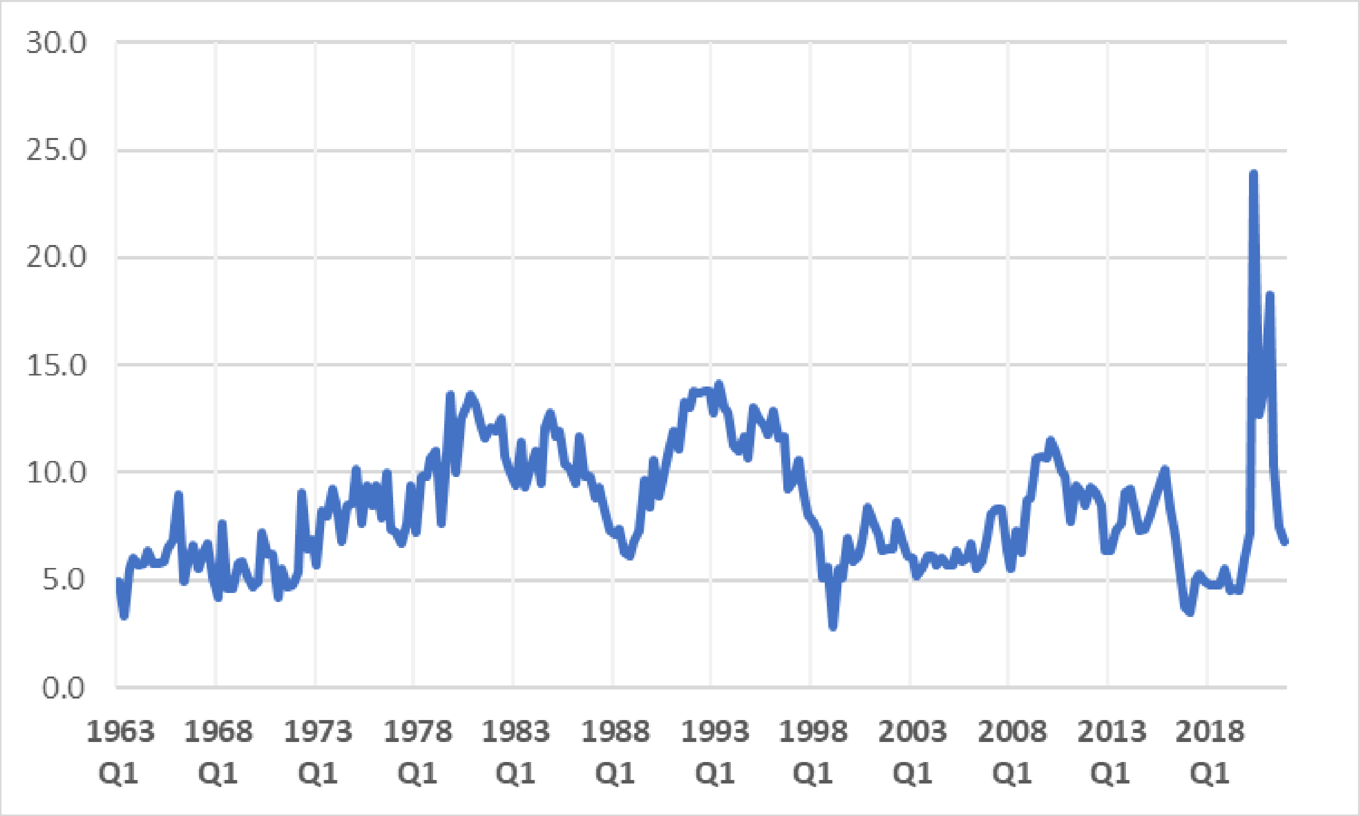
The furlough scheme creates a problem of excess demand just like in wartime when we pay soldiers who produce nothing.

The rise in public borrowing in 2020-21 was the largest since 1939-40 and is inherently inflationary.

In WW2 inflation was kept down by rationing and price controls – not desirable and not present today.

# Lockdown meant excess money was not immediately spent

**Household savings ratio**




Source: ONS

The savings ratio rose briefly to an all time high but:

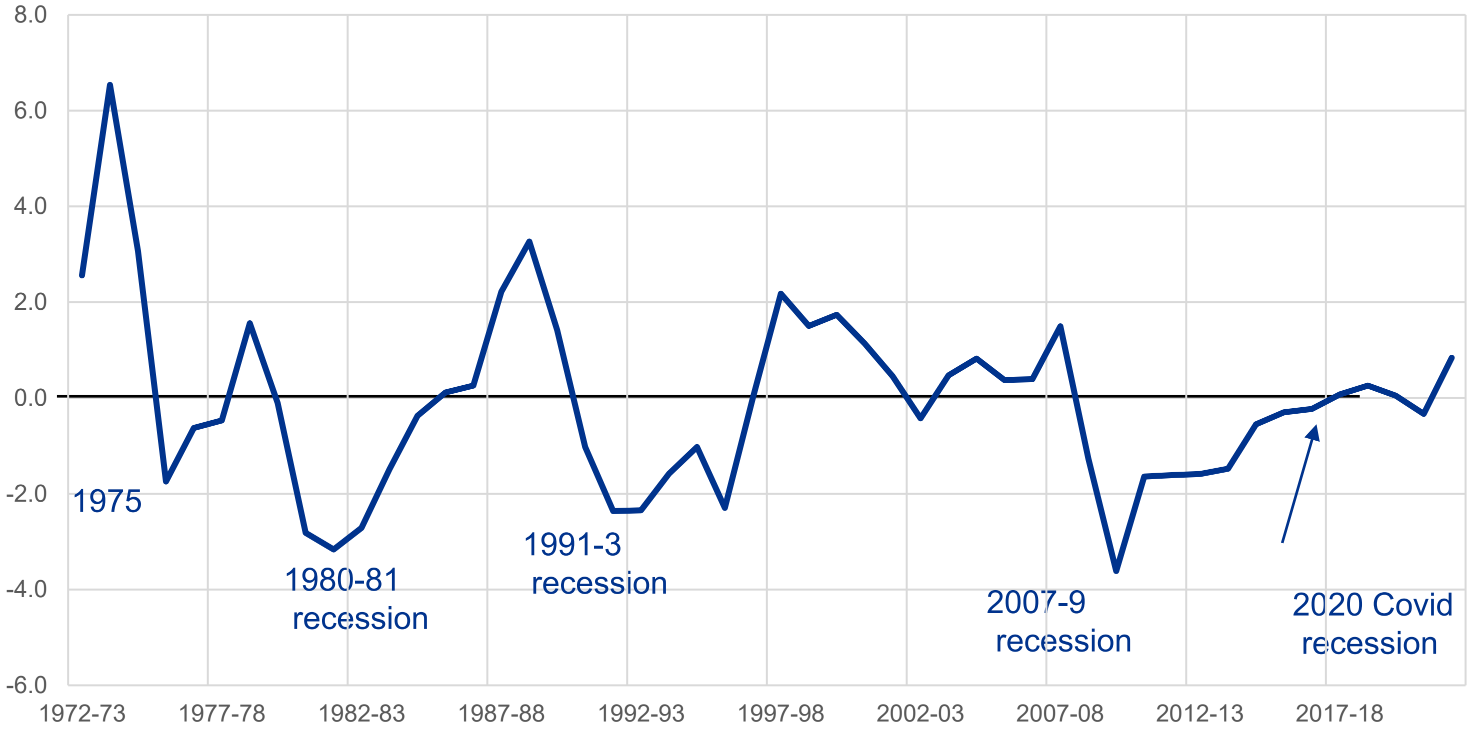
- Not because of a loss of confidence (genuine recession); but
- Because spending opportunities were temporarily withdrawn

Deficient demand caused a fall in inflation to 0.8% in 2020

But there remains a monetary overhang, and as lockdown came to an end, this money was spent and inflation started to rise.

# The Covid recession was unlike any other….

**The Output Gap as % of GDP**




"[there is] only a small margin of spare capacity since the start of the pandemic, reflecting our judgement that most of the fall in output during 2020 should be thought of as a simultaneous contraction in demand and supply."

OBR March 2021

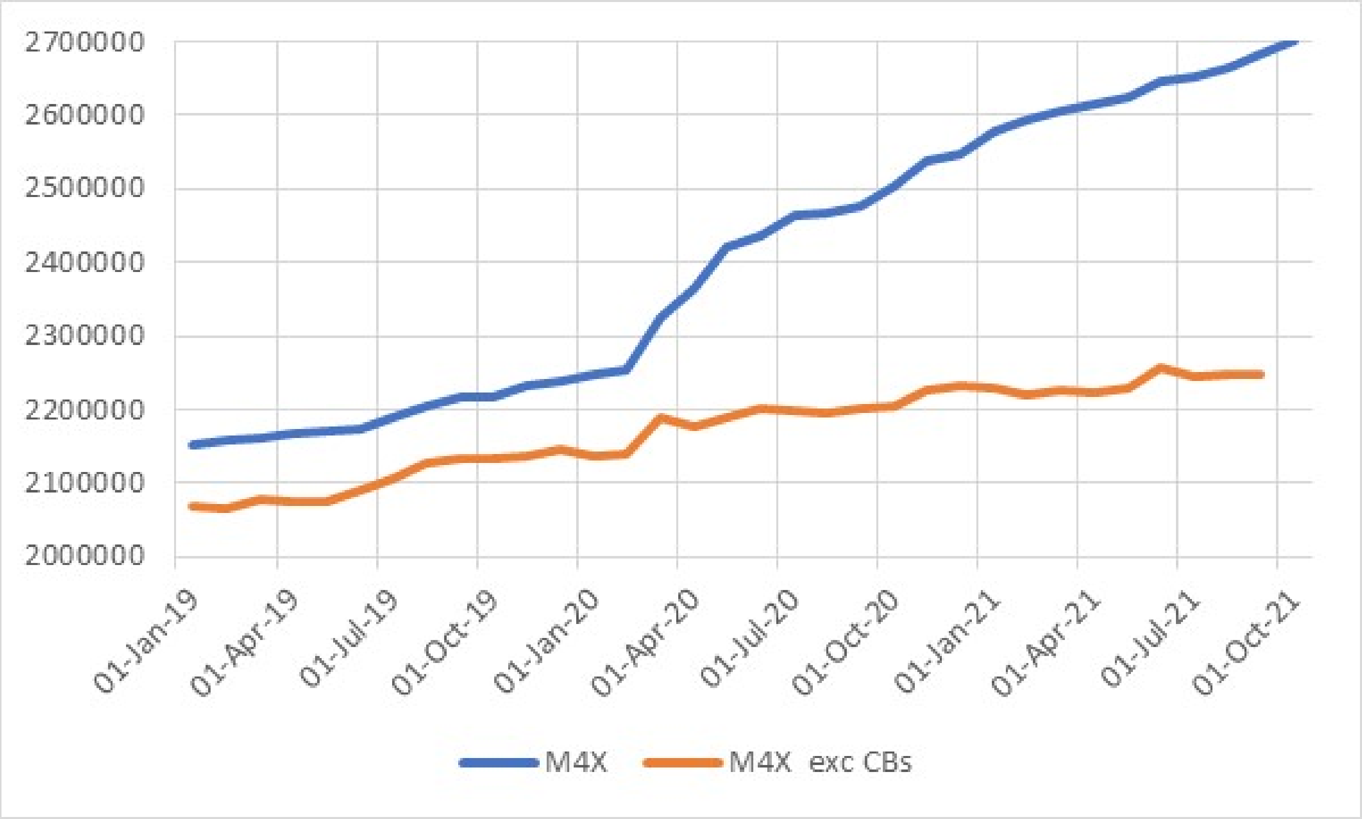
"It is far from clear that an additional monetary stimulus was required either last year or this."

Mervyn King, former Governor of the Bank of England, Oct 2021

Source: Office for Budget Responsibility

# ...yet it was treated with QE, just like the 2009 recession

**Growth of the broad money supply since Covid struck (£m)**




Source: Bank of England

The (necessary) furlough scheme was not funded by taxation or gilt sales but by printing money (QE).

As a result, from March 2020 to October 2021 the money supply increased by 16 per cent.

Over the same period, nominal GDP has risen by only 4 per cent. There was little spare capacity, so the monetary increase is inflationary.

# The same story is being played out across the Western world

| | | Canada | France | Germany | Italy | Japan | Spain | UK | US |
|---|---|---|---|---|---|---|---|---|---|
| Inflation target | | **2** | **2** | **2** | **2** | **2** | **2** | **2** | **2** |
| Consumer price index (latest 12 month % change) | | **6.7** | **4.5** | **7.3** | **6.5** | **1.2** | **9.8** | **6.2** | **8.5** |
| Money supply growth (% change from Q1 2020 to Q4 2021) | | **17.7** | **17.2** | **17.2** | **17.2** | **10.6** | **17.2** | **18** | **36.5** |
| Government deficit % GDP: | 2020 | -11.4 | -9.1 | -4.3 | -9.6 | -10.3 | -11 | -9.2 | -15.3 |
| | 2019 | 0 | -3.1 | 1.5 | -1.5 | -2.9 | -2.9 | -2.2 | -6.4 |

Source: OECD

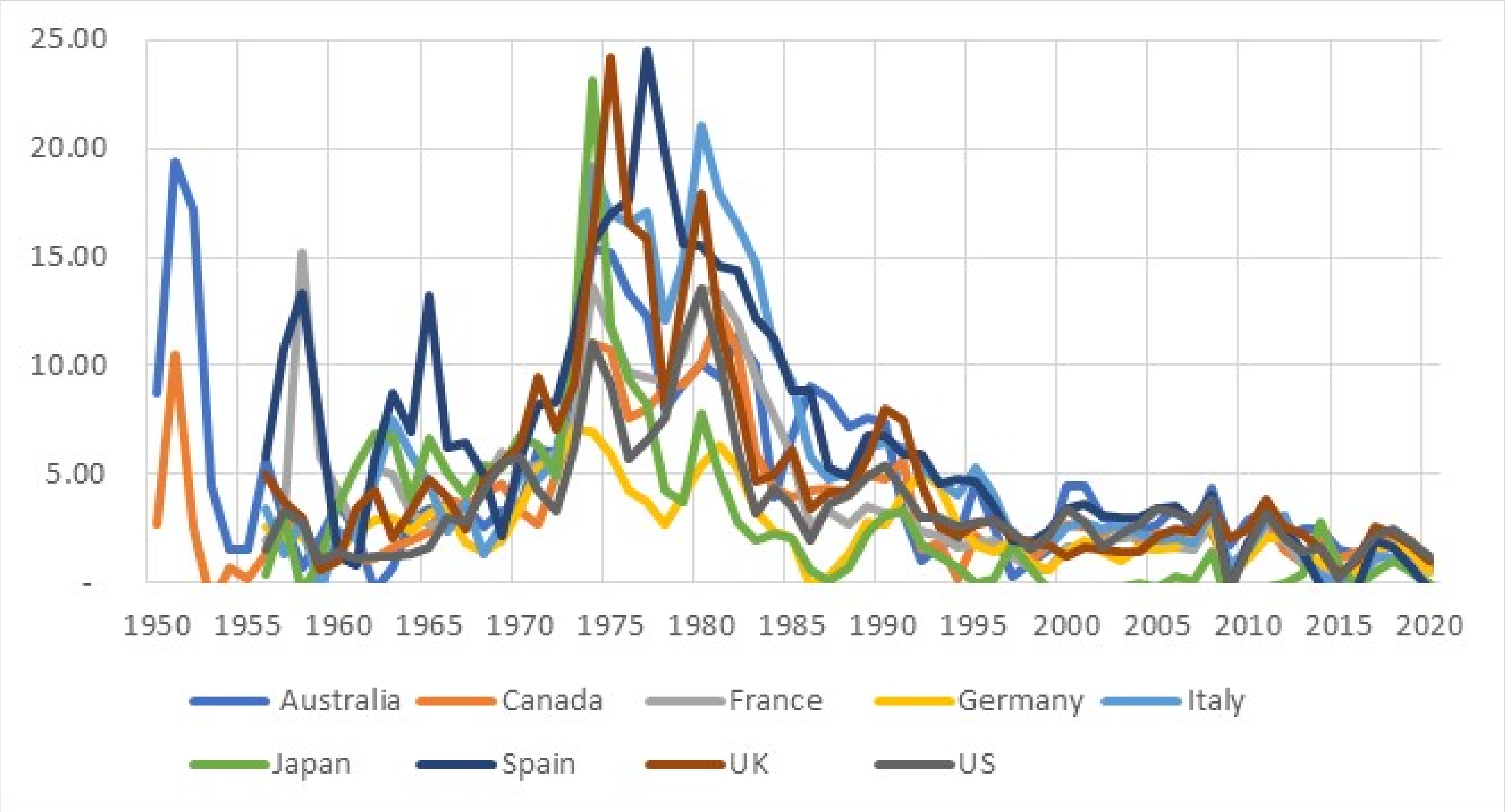
In all the major economies except Japan (which had a far smaller pandemic);

- Measures to deal with the pandemic **led to public sector deficits and rapid monetary growth.**
- Inflation over the past 12 months has **been well above target.**
- **The US leads the way** with the biggest deficit, the fastest money growth and the second worst inflation problem despite being sheltered from the high gas prices afflicting Europe.

**There were similar widespread policy errors in the 1970s, led by the US, with dire inflationary results**

# So are conditions in place for a re-run of the Great Inflation?

**We can use regression analysis to assess the relative weight of these factors**




Source: OECD

**Similarities:**

Large US government deficit injecting money into the system

Global policy errors leading to excess demand in many countries at once

Huge rises in energy prices pushing up inflation everywhere

**Differences:**

Policy makers accustomed to floating exchange rate, unlike in the aftermath of the breakdown of Bretton Woods

Inflation expectations may still be anchored by targets, which are still in place

Independent central banks more likely to take corrective action to hit inflation targets compared with the 1970s

# Key drivers of inflation and their estimated effects

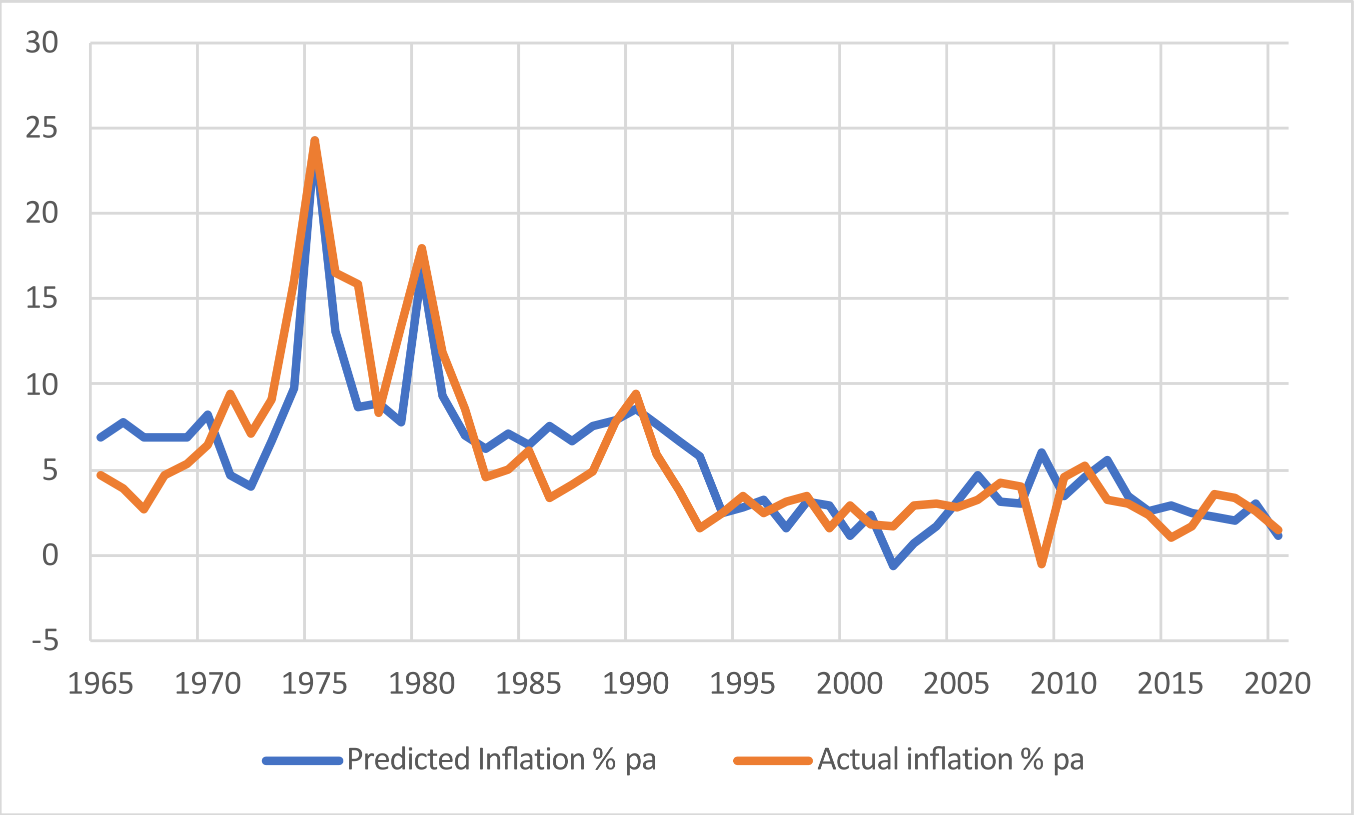
| | |
|---|---|
| Constant term | 2.59 |
| Output gap as % GDP two years ago | 0.76 |
| Public deficit as % GDP two years ago | 0.72 |
| Broad money % pa three years ago | 0.21 |
| Oil & gas prices % changes weighted by shares of GDP | 1.03 |
| Inflation targeting dummy | 3.69 |

| **Regression Statistics** | |
|---|---|
| R Square | 0.71 |
| Standard Error | 2.73 |
| Observations | 57 |

Source: author's calculations

# The equation provides a convincing fit for past data...

**Consumer price inflation from 1965 to 2023 (percent per annum)**

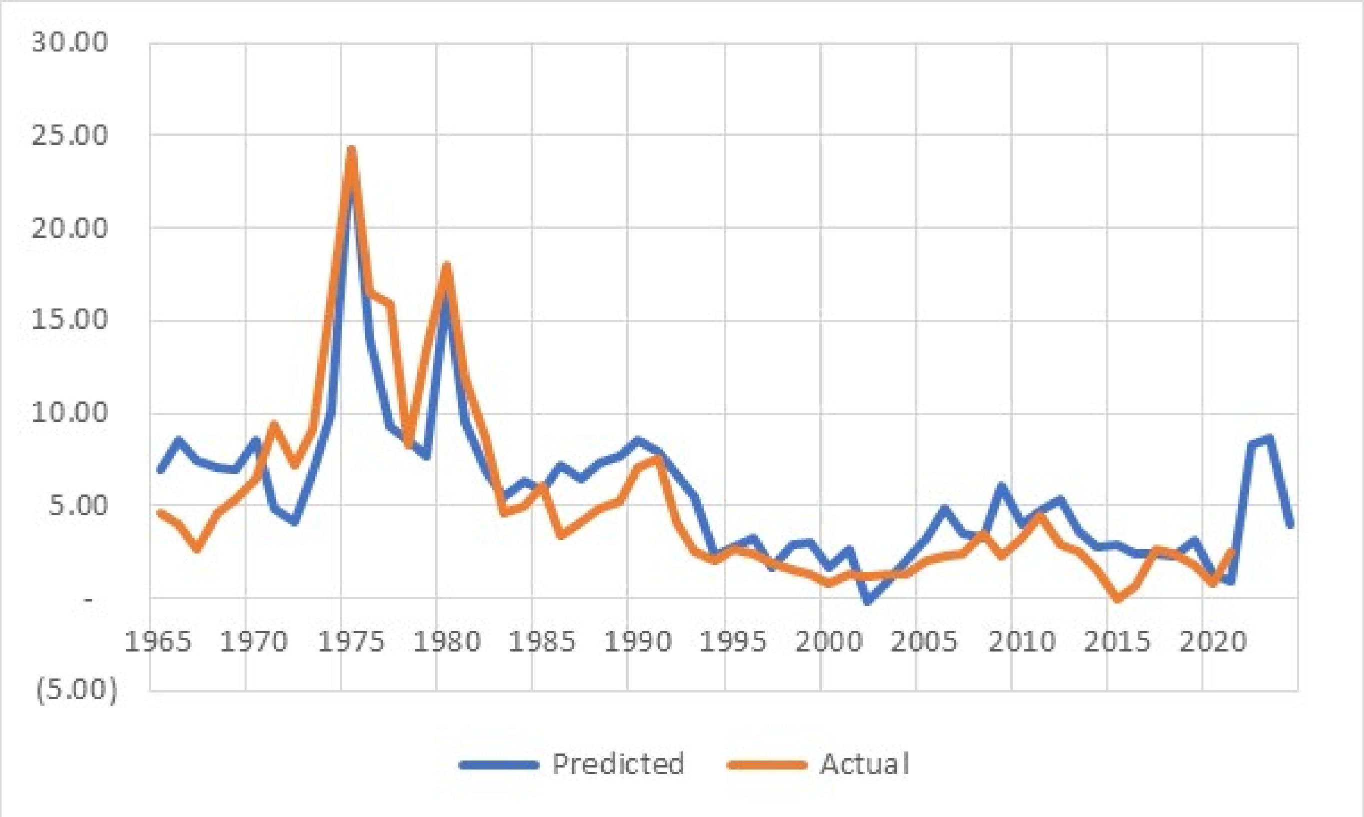



**Inflation largely depends on past values of explanatory variables.**

**So inflation prospects for 2022 and 2023 can be calculated from known data.**

# ...and predicts sharply higher inflation both this year and next

**Consumer price inflation from 1965 to 2023 (percent per annum)**




Inflation forecast to average

- **8.25%** in **2022**; rising to
- **8.7%  2023 then** falling to
- **4% in 2024**

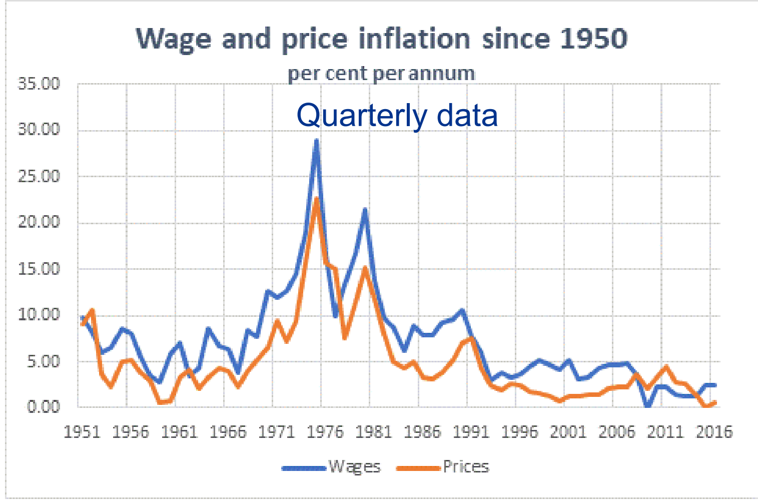
**That assumes:**

- **energy prices in 2022 and 2023 are on average unchanged from 2021; and**
- **that the OBR prediction of falling public borrowing this year is not invalidated by new government measures**

# Higher inflation and declining monetary growth will lead to a recession

# The start of a new wage-price spiral?

**This year's wage increases are an important reason why inflation is unlikely to decline sharply next year**




Source: A Millennium of Macroeconomic data for the UK


Source: ONS

The UK labour market is tight, with more vacancies than people available for work

Competition for scarce labour is driving up wages.

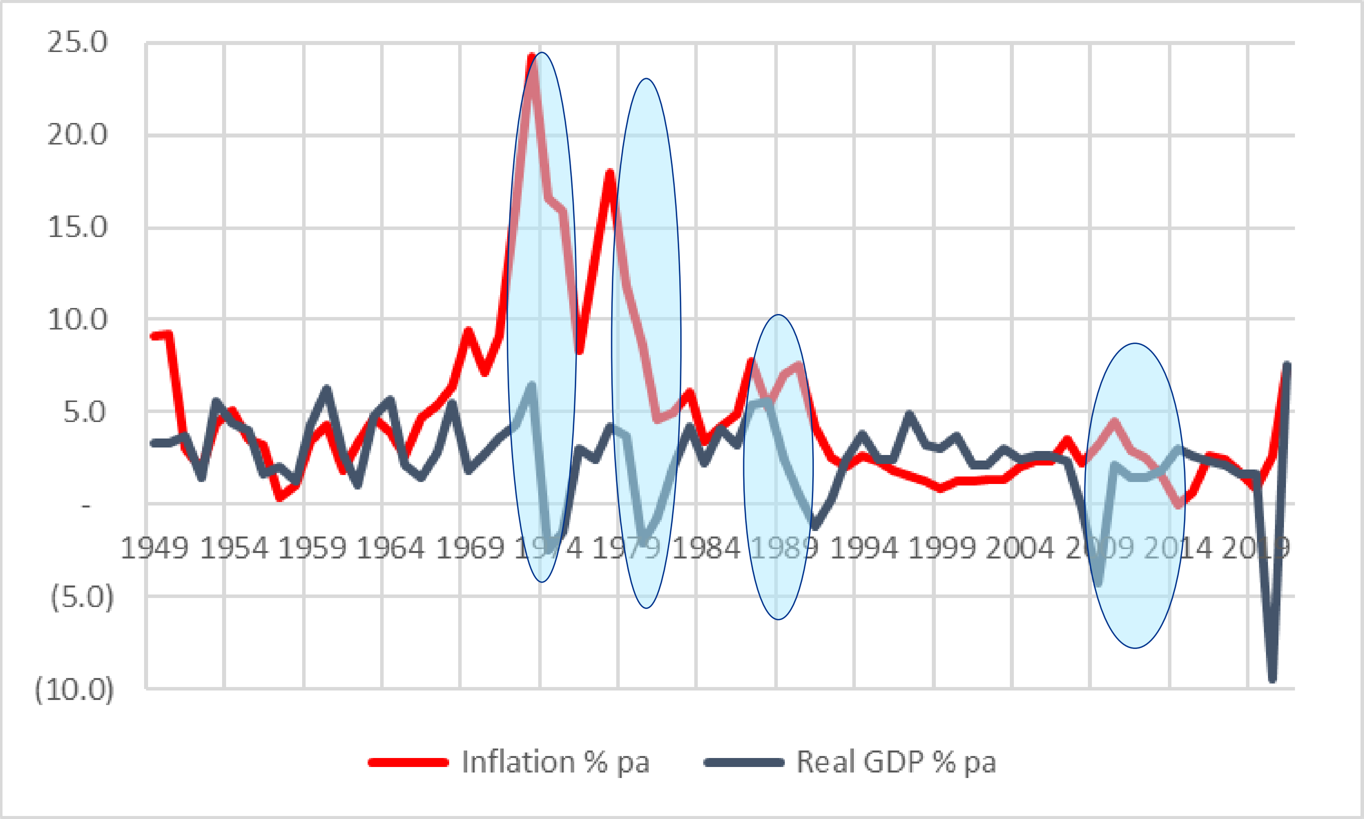
**The current increase in wage inflation is the sharpest since 1976**

Companies cannot afford to absorb these costs and banks certainly won't lend to fund them

So higher wages lead inevitably to higher prices.- and hence to the next round of wage demands.

# High inflation is worrying because eliminating it is always painful

### Inflation and GDP growth




Source: ONS RPI data until 1988 then CPI,.

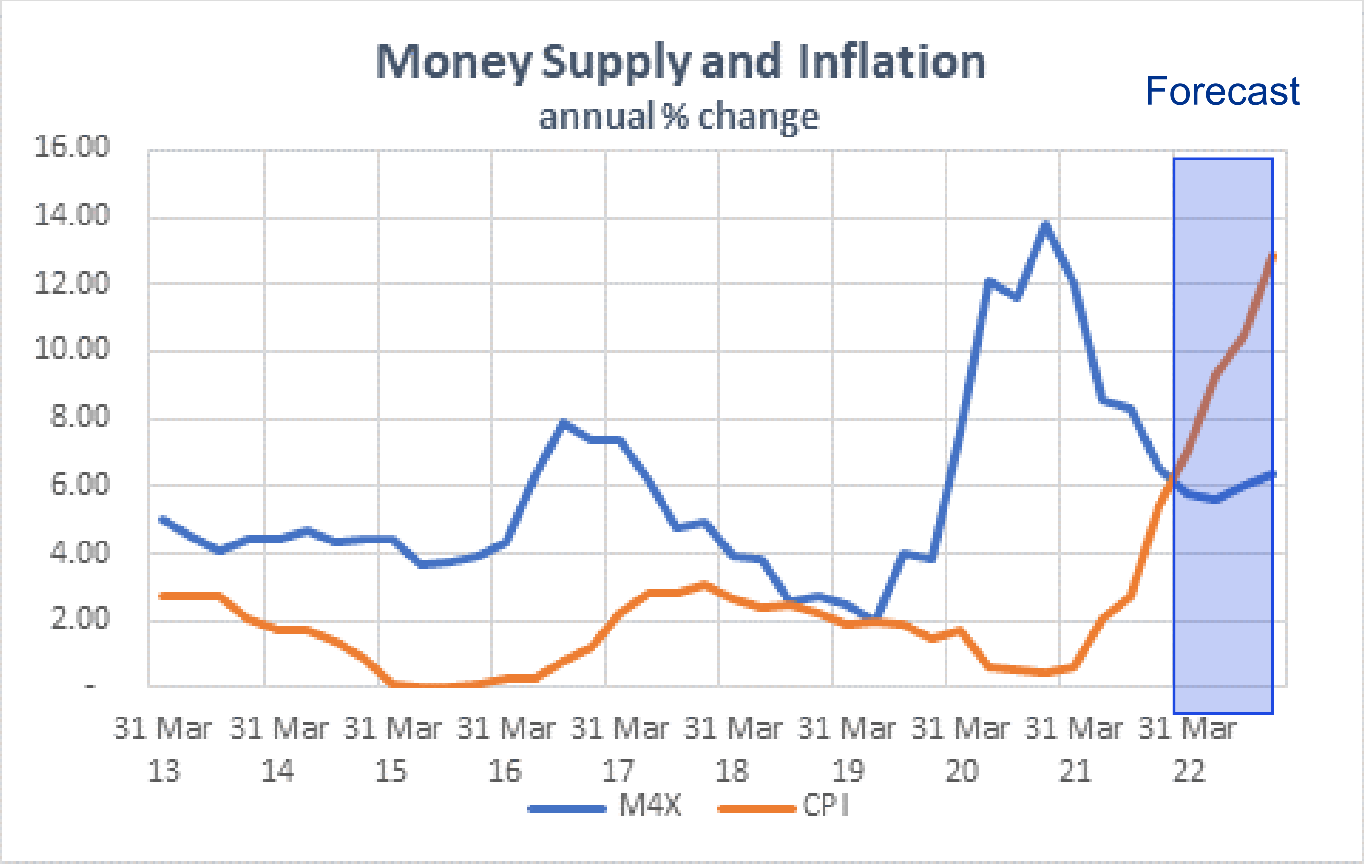
It took major recessions to eliminate the inflation associated with each of the two oil price hikes

It took another recession to eliminate the inflation following the Lawson boom of 1989

The recession following the banking crisis of 2007-8 got inflation back onto its 2% target from a peak of nearly 5%.

It will take another recession to eliminate the current inflation.

# Monetary growth rate now well below inflation




Money growth was boosted by QE in 2020, but has been slowing sharply as QE ended.

Inflation has risen sharply and will continue to rise this year.

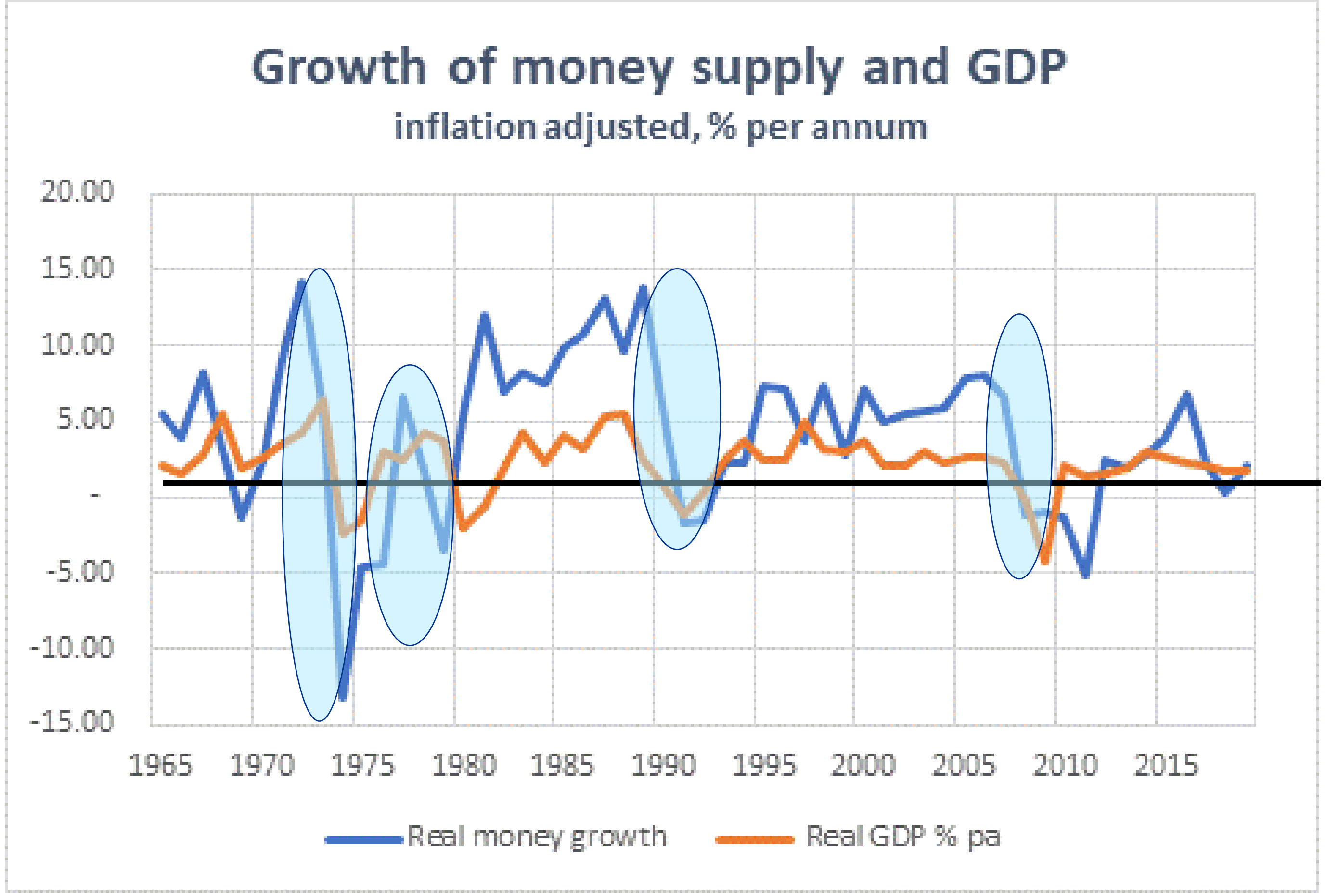
So monetary growth now inadequate to finance new transactions

In real terms monetary growth is now minus 6%.

Strong downward pressure on economic activity.

Source: ONS and Bank of England

# Negative real monetary growth has always led to recession




**Sharp declines in the growth of the real money supply presaged recession in 1972-4, in 1977-9, in 1989-91**

**The decline of around 6% currently underway is already as great as in 1976-7.**

**Recession looks almost inevitable.**

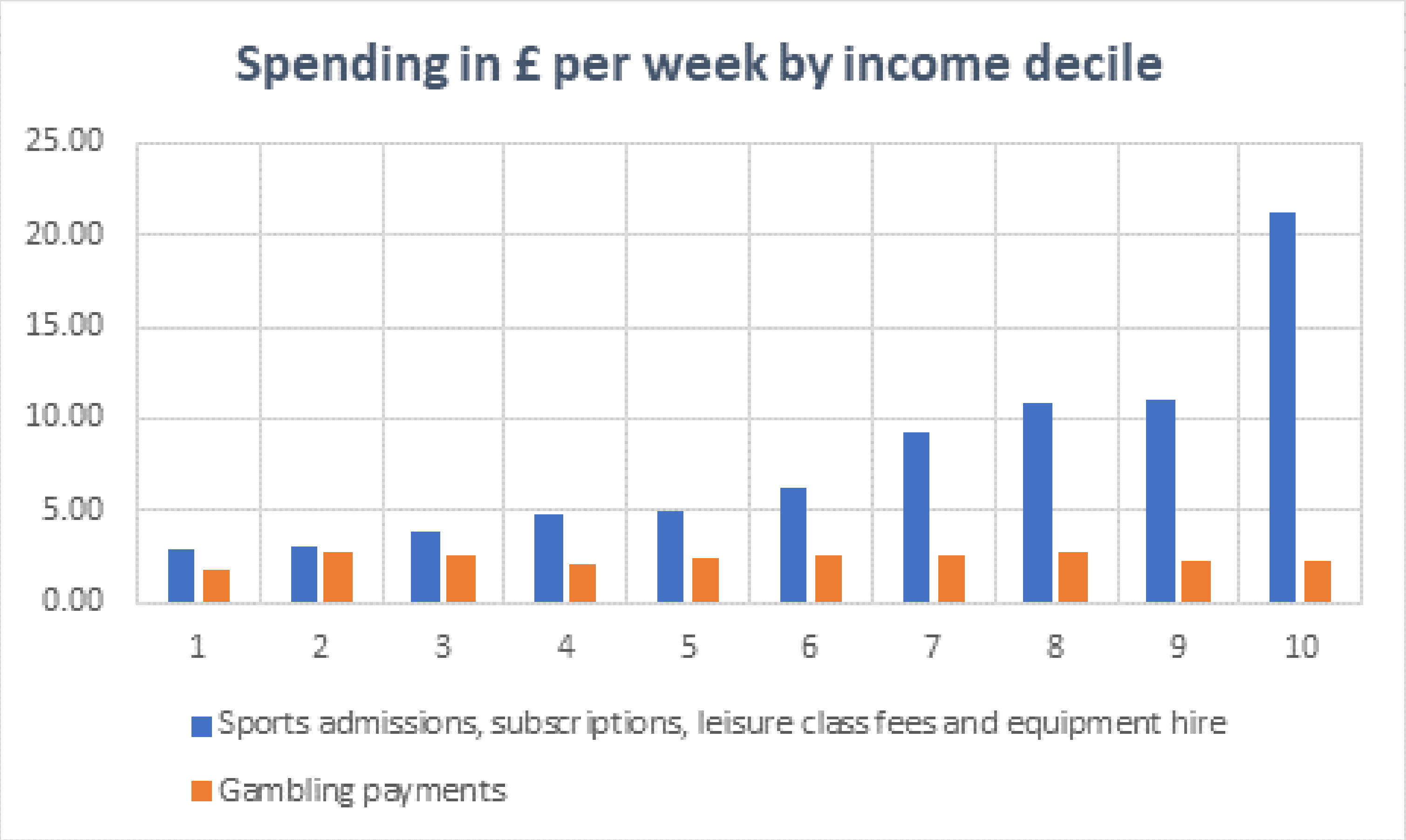
# Gambling demand resilient in economic downturns

The evidence from Family Spending data

# Spending on leisure activities usually increases with income


Source: ONS Living Costs and Food Survey 2019-2020

# But gambling is a notable exception




Source: ONS Living Costs and Food Survey 2019-2020

# Gambling is surprisingly like milk, sugar or potatoes...

| Necessary spending: relatively invariant to income | £/week average | Ratio rich/poor |
|---|---|---|
| Cigarettes | 2.6 | 0.77 |
| Milk | 2.1 | 0.94 |
| Baby toiletries and accessories (disposable) | 0.6 | 0.94 |
| Bus and coach fares | 1.5 | 1.00 |
| Gambling payments | 2.4 | 1.03 |
| Confectionery products | 0.8 | 1.04 |
| Other tubers and products of tuber vegetables | 1.8 | 1.08 |
| Electricity | 12.5 | 1.10 |
| Margarine, other vegetable fats and peanut butter | 0.6 | 1.12 |
| Toilet paper | 1 | 1.15 |

Survey covers some 6000 households and around 180 spending categories

Carries ONS seal of approval as a national statistic.

Has been going, with periodic changes, since 1957

Provides essential input to government statistics, such RPI/CPI and breakdown of household spending in National Income statistics.

Source: ONS Living Costs and Food Survey 2019-2020 Rich denotes top 3 income deciles, poor denotes bottom 3 deciles

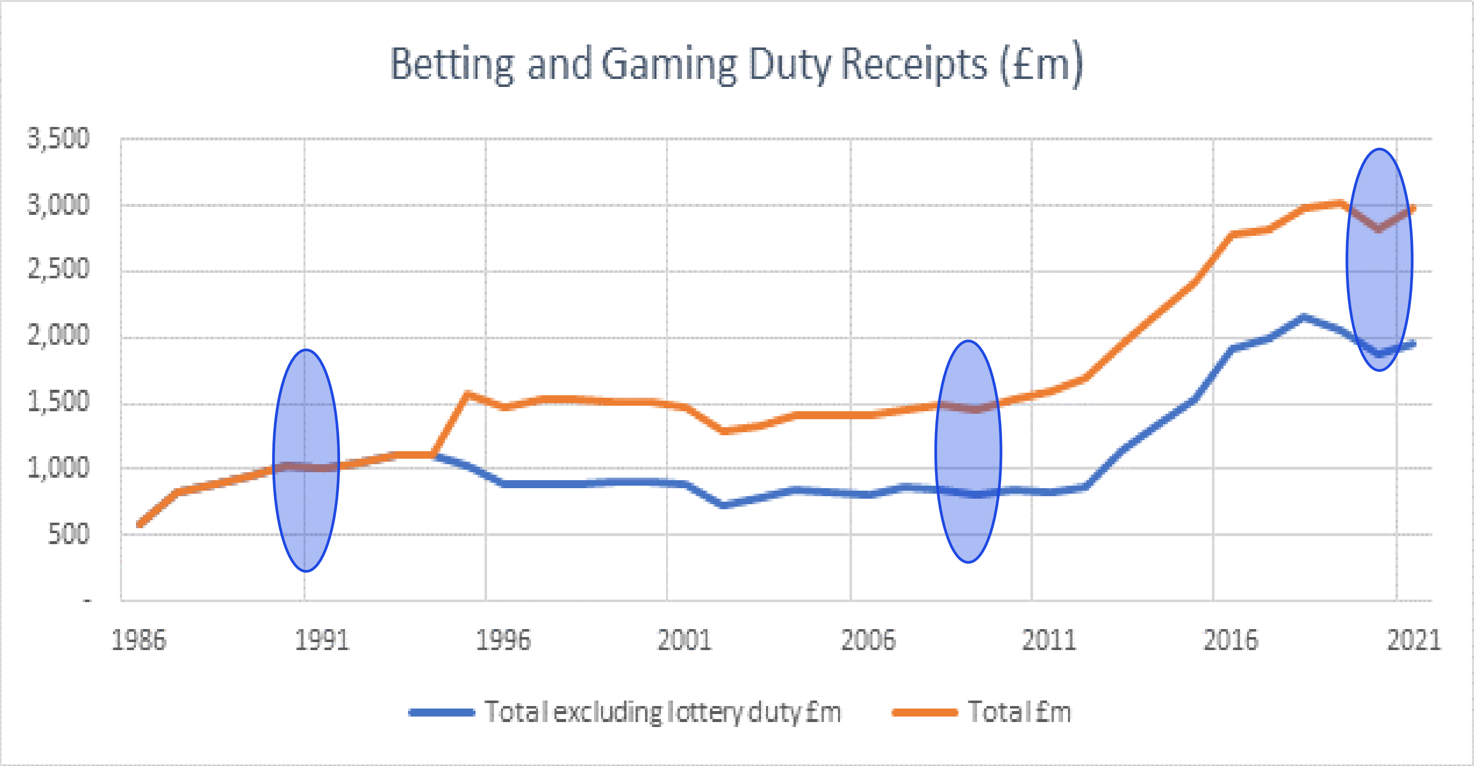
# and unlike most items, where spending rises with income

| Discretionary spending: relatively variable with income | | |
|---|---|---|
| | *£/week average* | *Ratio rich/poor* |
| Clothing | 18.7 | 2.54 |
| Glassware, tableware and household utensils | 1.8 | 3.07 |
| Total expenditure | 587.9 | 3.59 |
| Alcoholic drinks (away from home) | 8.3 | 4.15 |
| Equipment for sport, camping, open-air recreation | 1.7 | 5.38 |
| Medical insurance premiums | 2.4 | 6.46 |
| Rail and tube fares | 4.6 | 8.00 |
| Income tax, payments less refunds | 105.2 | 11.90 |
| Life assurance and contributions to pension funds | 34.7 | 12.15 |

Source: ONS Living Costs and Food Survey 2019-2020

# Is gambling recession-proof?

What is true across the income spectrum also appears to be true when income falls over time




Source: HMRC

The recessions of 1991, and 2007 had no visible effect on Betting and Gaming duty. There were some offsetting factors in 2007-9.

The Covid pandemic did hit gambling but that was due to government measures which directly impacted much gambling activity:

- Lockdown
- Social distancing
- Cancellation of sporting events

# A simple message: more to fear from inflation than recession

**Illustrative accounts of typical large gambling company in a normal year**

| | Base case | | 10% higher inflation and recession | |
|---|---|---|---|---|
| *£m* | *Retail* | *Online* | *Retail* | *Online* |
| Revenue | 720 | 740 | 720 | 740 |
| Duties and cost of sales | -160 | -200 | -160 | -200 |
| Gross profit | 560 | 540 | 560 | 540 |
| Administrative expenses | -420 | -370 | -462 | -407 |
| Depreciation and amortization | -70 | -50 | -70 | -50 |
| Operating profit | 70 | 120 | 28 | 83 |

"Average total pay growth for the private sector was 8.2% in January to March 2022, and for the public sector was 1.6% in the same time period; the finance and business services sector showed the largest growth rate (10.7%), partly because of strong bonus payments"

Source: ONS Average weekly earnings survey, May 2022.

# The good news: gambling demand  very resilient in economic downturns

The evidence from time series data

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