

NIESR Monthly GDP Tracker

UK Economy on the Road to Recovery in 2024 Following the Mild Recession

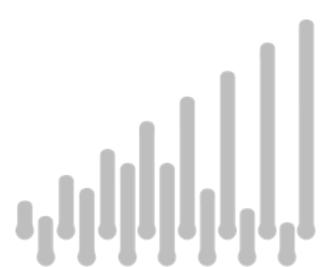
Paula Bejarano Carbo and Hailey Low

13 March 2024

"Today's ONS data indicate that monthly GDP grew by 0.2 per cent in January 2024, following a fall of 0.1 per cent in December 2023. While this seems positive, GDP fell by 0.1 per cent in the three months to January, in line with our forecast last month. In broader terms, UK economic growth has been near-zero since 2022 and GDP per head remains lower than pre-Covid. To escape the low-growth trap, structural changes are needed, such as an increase in public investment, particularly in infrastructure, education and health – which would also support growth in business investment."

Paula Bejarano Carbo

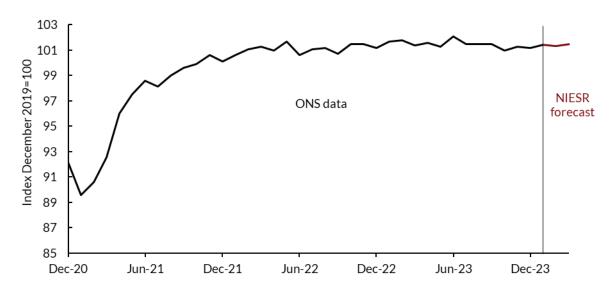
Economist, NIESR



Main points

- Monthly GDP grew by 0.2 per cent in January, following a contraction of 0.1 per cent in December. This monthly figure was mainly driven by increasing output in construction and services, particularly retail and wholesaling.
- GDP contracted by 0.1 per cent in the three months to January relative to the previous three-month period, in line with our previous forecast. This was generated by an output fall in construction and production.
- We forecast GDP to grow by 0.3 per cent in the first quarter of 2024. This forecast remains broadly consistent with the longer-term trend of low, but stable economic growth in the United Kingdom (Figure 1).
- As we noted in our <u>response</u> to last week's Spring Budget, the measures implemented in
 the relatively low-key budget are unlikely to unlock the UK's growth and productivity
 problems. To escape the low-growth trap, structural changes are needed, such as an
 increase in public investment, particularly in infrastructure, education and health –
 which would also support growth in business investment.





Economic setting

In our previous GDP tracker, published in January, we observed that GDP contracted by 0.3 per cent in the fourth quarter of 2023 relative to the previous quarter, generated by contractions in all main sectors. Looking at the longer-term picture, GDP growth has been near zero since early 2022. This outlook for economic growth is quite low by historical standards (Figure 2).

16.0 15.5 15.0 14.5 14.0 Forecast 13.5 13.0 12.5 1948 1960 1972 1984 1996 2008 2032 2020 GDP 1948-73 Trend --- 1973-2007 Trend 2007-19 Trend Current trend

Figure 2- UK GDP growth trends

Source: ONS, NIESR calculations

Today's data suggest that monthly GDP grew by 0.2 per cent in January, following a contraction of 0.1 per cent in December. This monthly figure was mainly driven by increasing output in construction and services, particularly retail and wholesaling – with consumers optimising retail spending over the festive period. This return to growth in January could be a turning point after the United Kingdom was reported to have entered a technical recession in the second half of 2023. We forecast GDP to grow by 0.3 per cent in the first quarter of 2024.

To further contextualise the near-term outlook for GDP, figure 3 compares spending and hiring indicators to pre-pandemic levels, while figure 4 records recent trends in PMIs. High frequency credit and debit card spending indicators began their seasonal uptick in November, peaking on 22 December, and plummeted thereafter – as is expected seasonally. At the same time, the services PMI continues to suggest growth in the service sector, though it fell slightly from 54.3 in January to 53.8 in February. Further, the recent ONS retail sales data suggest that retails sales volumes rebounded by 3.4 per cent in January, following a record fall of 3.3 per cent in December 2023. The S&P Global/CIPS UK Composite PMI – which combines comparable services and manufacturing indices – increased marginally from 52.9 in January to 53 in February. It is encouraging that overall, private-sector output showed signs of expansion in

February following a year marked by subdued growth. Taken together, these early indicators suggest that, though GDP growth was subdued in 2023, we can be cautiously optimistic that GDP will grow in 2024.

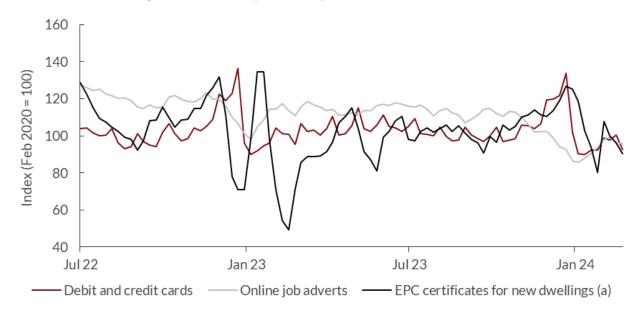


Figure 3 – Spending and hiring indicators (weekly indices)

Notes: (a) England and Wales. Debit and credit cards (CHAPS based): Index February 2020 = 100, a backward looking seven-day rolling average, non-seasonally adjusted, nominal prices. Job adverts: Index February 2020 = 100, weekly average. EPC certificates: Index February 2020 = 100, four-week rolling average, adjusted for timing of holidays.

Source: ONS, BoE, Adzuna, MHCLG, NIESR

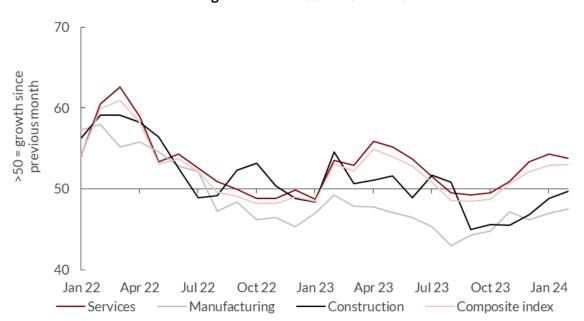


Figure 4 - Recent trends in PMIs

 $Sources: Refinitiv\ Datastream, S\&P$

News in latest ONS data

The monthly GDP data for January were better than we were expecting in last month's Tracker, growing by 0.2 per cent compared to our forecast of 0.1 per cent growth. GDP contracted by 0.1 per cent in the three months to January, in line with our previous forecast.

0.4 **NIESR** ONS data forecast 0.3 0.2 0.1 0.0 -0.1-0.2 -0.3-0.4-0.5 2023 2023 2023 2023 2024 3m to May Q2 July Q3 Oct Nov Q4 Q1 Q1 April Aug Jan

Figure 5 - UK GDP growth (3 months on previous 3 months, per cent)

Figure 6 shows a heat map of the data surprises across sectors in the monthly data, relative to last month's GDP Tracker, highlighting the sectors where the surprises are large relative to the volatility of the output data.

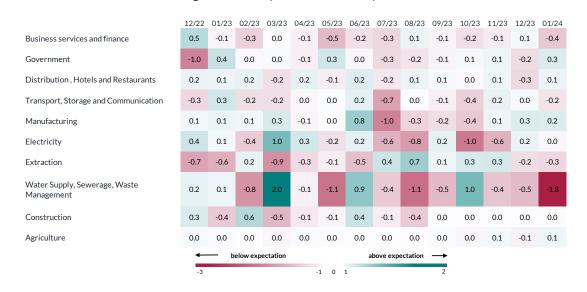


Figure 6 - Surprises in monthly data

Note: Cells show forecast errors as a fraction of the standard deviation of errors for each series.

For more information on our forecast estimates relative to ONS data, please see the 'Health Warning' section below.

Sectoral detail

GDP contracted in the three months to January, driven by contractions in the construction and manufacturing sectors, with no growth in the services sector to offset these declines (Figure 7). Our forecast for the first quarter of 2024 sees the service sector driving growth.

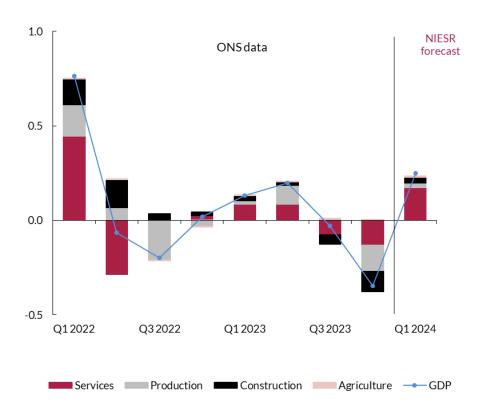


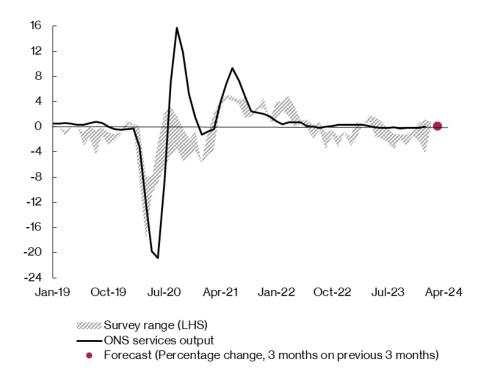
Figure 7 - Contributions to quarterly GDP growth (percentage points)

Services (80 per cent of GDP)

The survey balances point to improved activity in the services sector at the start of 2024, as shown by the survey indicators in figures 4 and 8. The S&P Global/CIPS UK Services PMI reported a balance of 53.8 in February, decreasing slightly from 54.3 in January. Survey respondents cited increased demand in this sector, as noted by increases in new order volumes and total order volumes, partially resulting from rising business and consumer confidence. The PMI report notes that some firms also cited the prospect of lower interest rates as a factor driving a turnaround in customer demand and increased confidence.

Altogether, we forecast growth of 0.2 per cent in the services sector in the first quarter of 2024.

Figure 8 - ONS service sector growth (3 months on previous 3 months, per cent) compared with swathe of business survey balances (standardised)



Note: The shaded swathe shows the highest and lowest values each month of a range of business survey balances that have been standardised so that they have the same mean and standard deviation as the quarterly growth of the ONS series. Source: ONS, CBI, Markit, Bank of England Agents, EC, NIESR calculations.

Construction (six per cent of GDP)

The S&P Global/CIPS UK Construction PMI survey registered an increase from 48.8 in January to 49.7 in February, its highest level since August 2023 and only marginally below the neutral 50 (which indicates contracting output). Nonetheless, the PMI balance still marks the sixth consecutive month this balance registers below the neutral 50. House building saw the biggest turnaround in business activity, recording an index of 49.8, up from 44.2. Survey respondents noted that improved market conditions and increased client confidence led to this spur in activity in February, with total new work increasing for the first time in six months. That this occurred while interest rates remain at their peak is optimistic for the interest-sensitive construction sector.

We forecast growth in this sector to flatline in the first quarter of 2024.

Production (14 per cent of GDP)

We forecast production sector output to grow by 0.2 per cent in first quarter of 2024, though output in this sector is volatile and difficult to predict with accuracy on a quarterly basis. The production sector comprises manufacturing; mining and quarrying (which includes oil and gas extraction); electricity, gas, steam and air conditioning; and water supply and sewerage. The

largest of these sectors are manufacturing, accounting for 10 per cent of GDP, and mining and quarrying, accounting for 1 per cent of GDP.

Manufacturing

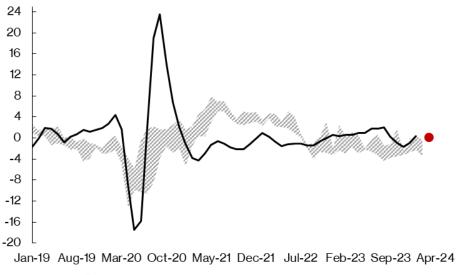
The S&P Global/CIPS UK manufacturing PMI rose slightly from 47 in January to 47.5 in February, representing the 19th consecutive month this sector has contracted. This sustained decline has been driven by a continuing combination of weak domestic and export demand, tight financial conditions, eroding consumer confidence, and a preference for reduced inventory holdings (as a cashflow-improving measure). Indeed, contractions were registered for four out of the five PMI subcomponents (new orders, output, employment and stocks of purchases), indicating the extent to which this sector remains subdued.

However, we expect to see this sector grow by 0.7 per cent in the first quarter of 2024 relative to the previous quarter.

Mining and quarrying

Mining and quarrying (extraction) is a small but erratic component of industrial production that can have an influence on overall GDP growth. We forecast this sector to contract by 1.9 per cent in the first quarter of 2024.

Figure 9 - ONS manufacturing sector growth (3 months on previous 3 months, per cent) compared with swathe of business survey balances (standardised)



- Survey range
 - ONS manufacturing output
 - Forecast (Percentage change, 3 months on previous 3 months)

Note: The shaded swathe shows the highest and lowest values each month of a range of business survey balances that have been standardised so that they have the same mean and standard deviation as the quarterly growth of the ONS series. Source: ONS. CBI. Markit. Bank of England Agents. EC. NIESR calculations.

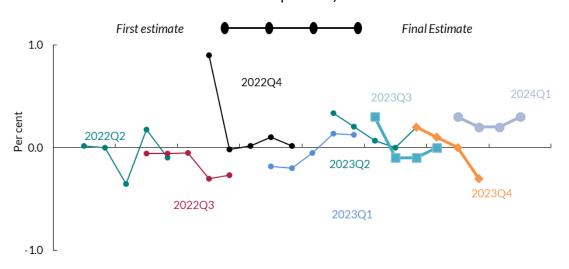
Table 1 - Summary Table of GDP growth (2019=100)

Calcast Calc				Index of Services - Components Index of Production - Components			1							
Campaigness Part	2019=100	000: 1	Index of	Business	Government	Distribution.	Transport, Storage	Index of					Index of	4 : "
File		GDP Index	Services					Production	Manufacturing				Construction	Agriculture
Transport 1900				finance	services	Restaurants	Communications				Quarrying			
March Marc		1000	796					135					62	7
Field 102	Latest weights			338	220	134	103		102	15	6	13		
Marc 28	Jan-23	102.5	104.0	104.9	101.6	100.4	110.8	94.0	100.3	63.4	64.7	105.8	104.4	85.5
March 25	Feb-23	102.6	104.0	105.2	101.7	100.1	109.5	93.9	100.3	62.4	67.7	104.2	107.1	85.6
May 22	Mar-23	102.2	103.5	105.0	102.0	98.5	108.0	94.6	100.9	64.5	65.6	106.6	106.9	85.6
Amer 20	Apr-23	102.4	103.7	104.9	101.9	99.7	108.4	94.8	101.5	63.3	65.6	104.6	106.1	85.5
MAZ2	May-23	102.1	103.6	104.5	102.5	99.1	108.4	93.9	101.0	60.2	65.8	102.7	105.8	85.5
Mag 2	Jun-23	102.9	103.8	104.5	103.0	99.8	108.9	96.4	104.2	61.5	64.9	104.1	107.5	85.5
Sep 28 1922 1922 1923 1943 1944 1936 1936 1938 1950 1920 1940	Jul-23	102.3	103.4	104.4	102.6	99.4	106.7	95.4	102.9	61.8	64.8	102.9	107.0	85.6
03-23 1016 1032 1014 1022 930 1080 831 1007 808 838 1026 1045 888 882 1020 1031 1044 1023 632 1020 1033 1044 1023 632 1020 1033 1044 1023 632 1020 1045 638 1022 1033 1044 1023 638 1022 1023 615 627 1021 1045 638 1022 1033 1044 1023 638 1022 1023 615 627 1021 1044 1023 638 1022 1023 1044 1023 1023 1044 1023 1023 1023 1024 1023 1024 1023 1024	Aug-23	102.3	103.5	104.6	102.8	99.4	106.9	95.1	102.4	62.2	66.7	101.3	104.5	85.7
No. 22	Sep-23	102.3	103.5	104.3	103.4	99.0	106.9	95.0	102.0	64.0	64.7	102.6	104.5	85.8
Description 100.00 100.0	Oct-23	101.8	103.2	104.3	102.6	99.0	106.0	93.7	100.7	60.9	63.6	103.6	104.5	85.8
Second Process 1966 1966 1968 1969 1969 1969 1969 1964 1968 1969 1969 1964 1968 1968 1969 1969 1968 1968 1968 1969 1969 1969 1968 1968 1968 1969	Nov-23	102.1	103.4	104.4	102.8	99.3	106.8	94.2	101.5	60.8	63.9	102.5	104.5	85.8
Fish-94 1002 1938 104.8 102.8 86.9 107.0 104.5 102.2 61.2 62.3 100.7 104.5 86.5	Dec-23	102.0	103.3	104.8	102.3	98.0	107.1	94.7	102.3	61.5	62.7	102.1	104.5	85.8
	Jan-24	102.2	103.5	104.6	102.8	99.2	106.6	94.5	102.3	61.8	61.9	99.9	104.5	86.0
Percentage charges, 3 months or previous 3 months	Feb-24	102.2	103.5	104.9	102.8	98.9	107.2	94.3	102.2	61.2	62.3	100.7	104.5	86.3
Jame 28	Mar-24	102.3	103.6	105.1	102.7	98.9	107.5	94.4	102.2	61.7	62.4	101.1	104.5	86.5
Jame 28	•	•												
Fine		Percentage cha	nge, 3 months o	n previous 3 mo	nths									
Fine	Jan-23					0.1	0.8	0.0	0.4	0.5	-5.6	0.3	0.6	-0.4
Mar-23	Feb-23													
Apr-22 0.1 0.1 0.2 0.7 0.9 0.3 0.4 0.9 0.6 0.4 4.0 0.6 1.2 0.1 1.2 0.1 1.3 1.2 1.4 1.4 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5	Mar-23	0.2	0.3	0.2	0.5	-0.8	1.2	0.1	0.6	1.4	-8.3	0.3	0.4	0.0
May 28														
June 29														
July 28	Jun-23													
July 20 0.0 0.3 0.7 0.4 0.7 13 20 1.3 0.3 1.8 0.1 0.1 0.2 0.5 0.1 0.2 1.7 0.1 1.5 1.0 0.2 0.3 0.2 0.1 0.2 0.3 1.1 0.7 1.0 2.0 0.3 0.7 1.0 2.0 0.3 0.7 1.0 0.2 0.3 0.7 1.2 0.3 0.7 2.2 0.3 0.0 </td <td>Jul-23</td> <td></td>	Jul-23													
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Nov-23														
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Percentage change, month on same month in previous year														
Percentage change, month on same month in previous year														
Jan-23														
Feb-23		Percentage cha	nge, month on s	ame month in pr	evious year									
Mar-23	Jan-23	1.1	1.5	2.3	-0.5	-0.1	4.3	-2.5	-1.9	-1.6	-15.7	-0.8	3.2	0.6
Apr-23	Feb-23	0.6	0.8	2.3	-0.9	-2.1	2.1	-2.3	-1.5	-3.2	-12.1	-2.1	5.8	0.0
May-23	Mar-23	0.2	0.2	1.7	-1.1	-3.1	1.5	-1.3	-0.5	1.7	-15.4	0.1	3.5	-0.3
Jun-23	Apr-23	0.6	0.7	1.5	0.8	-2.8	2.2	-0.9	0.8	-1.4	-16.9	-3.3	2.9	-0.5
Jul-23	May-23	-0.3	0.0	-0.1	0.8	-2.6	1.2	-2.1	-0.3	-4.7	-17.0	-3.4	0.3	-0.7
Aug-23 0 0 0 0 1 0 0 0 2 0 -14 15 12 2.9 -0.7 -8.6 -4.7 -0.1 -0.5 Sep-23 0 8 0.7 0.3 2.3 -0.2 -0.6 13 2.9 0.9 13.4 -3.0 0.0 0.0 0.1 Nov-23 0 0.3 -0.3 -0.3 1.0 -1.4 -1.6 0.2 1.9 -1.7 -14.2 -3.1 -0.9 0.4 Nov-23 0 0.0 0.2 -0.1 2.1 -1.9 -0.6 0.6 0.5 2.3 -3.6 -8.8 -3.3 -1.7 0.4 Nov-23 0 0.0 0.2 -0.1 2.1 -1.9 -0.6 0.6 0.5 2.0 -2.5 -4.3 -5.6 0.1 0.6 Nov-24 0 0.0 0.1 0.1 0.7 0.4 -0.4 -0.4 -0.2 13 -4.3 -4.8 -5.2 -2.2 1.0 Nov-24 0 0.0 0.1 0.1 0.7 0.4 -0.4 -0.4 -0.2 13 -4.3 -4.8 -5.2 -2.2 1.0 Nov-24 0 0.0 0.1 0.1 0.7 0.4 0.0 0.0 0.1 0.1 0.7 0.4 0.0 0.0 0.1 0.1 0.3 -1.6 -1.4 0.7 0.6 3.2 -3.1 2.3 -4.8 -5.2 0.2 -2.1 1.0 Nov-24 0 0.0 0.1 0.1 0.0 0.3 -0.6 -0.0 0.1 -1.8 0.0 Nov-24 0 0.0 0.1 0.1 0.0 0.3 -1.6 -1.4 0.7 0.6 3.2 -3.1 2.3 -0.2 0.0 Nov-24 0 0.0 0.1 0.2 -0.1 -0.1 12 0.4 0.2 0.6 -1.8 0.0 0.1 0.1 -1.8 0.0 Nov-24 0 0.0 0.1 0.2 -0.1 -0.1 12 0.4 0.2 0.6 -1.8 0.0 -1.9 -0.7 -0.1 Nov-24 0 0.0 0.1 0.2 -0.1 -0.1 12 0.4 0.2 0.6 -1.8 0.0 -1.9 -0.7 -0.1 Nov-24 0 0.0 0.1 0.2 0.0 0.0 0.5 0.7 0.5 0.	Jun-23	1.4	1.1	0.5	2.8	-1.2	2.7	1.5	4.1	-3.5	-16.1	-3.7	4.6	-0.8
Sep-23 0 0 8 0.7 0.3 2.3 -0.2 -0.6 1.3 2.9 0.9 -13.4 -3.0 0.0 0.1 Oct-23 -0.5 -0.5 -0.5 0.9 1.8 -2.1 -0.5 0.5 0.5 1.6 -12.3 -0.5 -0.5 -0.7 0.1 Nov-23 -0.3 -0.3 -0.3 1.0 1.4 1.6 0.2 1.9 1.7 -14.2 -3.1 -0.9 0.4 Dec-23 0.0 0 0.2 -0.1 2.1 1.9 -0.6 0.6 2.3 -3.6 8.8 -3.3 1.7 0.4 Jan-24 -0.3 -0.5 -0.3 1.2 1.2 1.2 -3.8 0.5 2.0 -2.5 -4.3 -5.6 0.1 0.6 Feb-24 -0.4 -0.5 -0.3 1.1 1.2 1.2 -2.1 0.4 1.9 1.0 -0.6 0.6 2.3 -3.6 -8.8 -3.3 2.4 0.8 Mar-24 0.0 0.1 0.1 0.7 0.4 0.4 -0.4 -0.2 1.3 -4.3 -4.8 -5.2 2.2 1.0 Mar-24 0.0 0.1 0.1 0.1 0.7 0.4 0.4 -0.4 -0.2 1.3 -4.3 -4.8 -5.2 2.2 1.0 Mar-24 0.0 0.1 0.1 0.1 0.7 0.4 0.4 0.4 -0.2 1.3 -4.3 -4.8 -5.2 0.2 1.0 Mar-23 0.5 0.9 0.0 1.4 0.5 2.9 -0.1 0.3 -1.6 0.6 6.0 0.1 1.8 0.0 Feb-23 0.1 0.0 0.3 0.1 0.1 0.1 1.2 0.4 0.2 0.6 1.8 0.0 1.9 0.7 0.1 0.3 0.6 6.0 0.1 0.0 0.3 0.1 0.3 0.1 0.3 0.1 0.3 0.1 0.7 0.8 0.2 0.0 0.1 0.2 0.0 0.1 0.2 0.0 0.0 0.1 0.1 0.1 0.0 0.3 0.1 0.0 0.3 0.1 0.0 0.3 0.1 0.0 0.3 0.1 0.0 0.3 0.1 0.0 0.3 0.1 0.0 0.3 0.1 0.0 0.3 0.1 0.0 0.3 0.1 0.0 0.3 0.1 0.0 0.3 0.1 0.0 0.3 0.1 0.3 0.2 0.6 0.0 0.0 0.9 0.5 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.5 0.7 0.7 0.7 0.7 0.7 0.7 0.7 0.7 0.7 0.7	Jul-23	0.4	0.2	0.2	2.0	-1.6	-1.5	1.0	3.6	-2.3	-20.1	-3.0	2.8	-0.8
Oct-23	Aug-23	0.3	0.1	0.0	2.0	-1.4	-1.5	1.2	2.9	-0.7	-8.6	-4.7	-0.1	-0.5
Nov-23	Sep-23	0.8	0.7	0.3	2.3	-0.2	-0.6	1.3	2.9	0.9	-13.4	-3.0	0.0	0.1
Dec-23	Oct-23	-0.5	-0.5	-0.5	0.9	-1.8	-2.1	-0.5	0.5	-1.6	-12.3	-0.5	-0.7	0.1
Jan-24	Nov-23	-0.3	-0.3	-0.3	1.0	-1.4	-1.6	0.2	1.9	-1.7	-14.2	-3.1	-0.9	0.4
Feb-24	Dec-23	0.0	0.2	-0.1	2.1	-1.9	-0.6	0.6	2.3	-3.6	-8.8	-3.3	-1.7	0.4
Mar-24 0.0 0.1 0.1 0.7 0.4 -0.4 -0.2 1.3 -4.3 -4.8 -5.2 -2.2 1.0	Jan-24	-0.3	-0.5	-0.3	1.2	-1.2	-3.8	0.5	2.0	-2.5	-4.3	-5.6	0.1	0.6
Percentage change, month on previous month Jan-23	Feb-24	-0.4	-0.5	-0.3	1.1	-1.2	-2.1	0.4	1.9	-2.0	-7.9	-3.3	-2.4	0.8
Jan-23 0.5 0.9 0.0 1.4 0.5 2.9 -0.1 0.3 -0.6 -6.0 0.1 -1.8 0.0 Feb-23 0.1 0.0 0.3 0.1 -0.3 -1.2 -0.1 0.0 -1.5 4.7 -1.5 2.6 0.1 Mar-23 -0.3 -0.5 -0.2 0.3 -1.6 -1.4 0.7 0.6 3.2 -3.1 2.3 -0.2 0.0 May-23 -0.1 0.2 -0.1 -0.1 1.2 0.4 0.2 0.6 -1.8 0.0 -1.9 -0.7 -0.1 Jun-23 -0.3 -0.1 -0.4 0.6 -0.6 0.0 -0.9 -0.5 -4.9 0.3 -1.8 -0.3 0.0 Jun-23 0.7 0.2 0.0 0.5 0.7 0.5 2.7 3.2 2.1 -1.3 1.3 1.6 0.0 Jun-23 0.0 0.1 0.2 0.2 <td>Mar-24</td> <td>0.0</td> <td>0.1</td> <td>0.1</td> <td>0.7</td> <td>0.4</td> <td>-0.4</td> <td>-0.2</td> <td>1.3</td> <td>-4.3</td> <td>-4.8</td> <td>-5.2</td> <td>-2.2</td> <td>1.0</td>	Mar-24	0.0	0.1	0.1	0.7	0.4	-0.4	-0.2	1.3	-4.3	-4.8	-5.2	-2.2	1.0
Jan-23 0.5 0.9 0.0 1.4 0.5 2.9 -0.1 0.3 -0.6 -6.0 0.1 -1.8 0.0 Feb-23 0.1 0.0 0.3 0.1 -0.3 -1.2 -0.1 0.0 -1.5 4.7 -1.5 2.6 0.1 Mar-23 -0.3 -0.5 -0.2 0.3 -1.6 -1.4 0.7 0.6 3.2 -3.1 2.3 -0.2 0.0 May-23 -0.1 0.2 -0.1 -0.1 1.2 0.4 0.2 0.6 -1.8 0.0 -1.9 -0.7 -0.1 Jun-23 -0.3 -0.1 -0.4 0.6 -0.6 0.0 -0.9 -0.5 -4.9 0.3 -1.8 -0.3 0.0 Jun-23 0.7 0.2 0.0 0.5 0.7 0.5 2.7 3.2 2.1 -1.3 1.3 1.6 0.0 Jun-23 0.0 0.1 0.2 0.2 <td></td>														
Feb-23 0.1 0.0 0.3 0.1 -0.3 1-12 -0.1 0.0 1-15 4.7 1-15 2.6 0.1 Mar-23 -0.3 -0.5 -0.2 0.3 1-16 1-14 0.7 0.6 3.2 -3.1 2.3 -0.2 0.0 Apr-23 0.1 0.0 1 0.2 -0.1 -0.1 1.2 0.4 0.6 -0.6 0.0 1.9 -0.5 1-49 0.3 1-18 1.0 0.0 Jul-23 1.7 0.2 0.0 0.5 0.7 0.5 1.7 0.5 1.7 0.5 1.2 0.6 1.2 0.6 1.3 1.3 1.6 0.0 Jul-23 1.0 0.1 0.2 0.0 1.0 0.1 0.2 0.2 0.0 0.0 0.2 1.0 1.2 0.6 1.2 0.6 1.2 1.3 1.3 1.6 0.0 Jul-23 1.0 0.0 0.1 0.2 0.2 0.0 0.0 0.2 1.0 1.0 1.2 0.6 1.2 0.6 1.2 1.1 1.0 1.0 1.0 0.0 Jul-23 1.0 0.0 0.1 0.2 0.2 0.0 0.0 0.2 1.0 1.0 1.2 0.6 1.2 1.1 1.0 1.0 1.0 0.0 Jul-23 1.0 0.1 0.2 0.2 0.0 0.0 0.2 1.0 1.0 1.2 0.6 1.0 1.2 0.6 1.0 1.0 1.2 0.6 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0		Percentage cha	nge, month on p	revious month										
Feb-23 0.1 0.0 0.3 0.1 -0.3 1-12 -0.1 0.0 1-15 4.7 1-15 2.6 0.1 Mar-23 -0.3 -0.5 -0.2 0.3 1-16 1-14 0.7 0.6 3.2 -3.1 2.3 -0.2 0.0 Apr-23 0.1 0.0 1 0.2 -0.1 -0.1 1.2 0.4 0.6 -0.6 0.0 1.9 -0.5 1-49 0.3 1-18 1.0 0.0 Jul-23 1.7 0.2 0.0 0.5 0.7 0.5 1.7 0.5 1.7 0.5 1.2 0.6 1.2 0.6 1.3 1.3 1.6 0.0 Jul-23 1.0 0.1 0.2 0.0 1.0 0.1 0.2 0.2 0.0 0.0 0.2 1.0 1.2 0.6 1.2 0.6 1.2 1.3 1.3 1.6 0.0 Jul-23 1.0 0.0 0.1 0.2 0.2 0.0 0.0 0.2 1.0 1.0 1.2 0.6 1.2 0.6 1.2 1.1 1.0 1.0 1.0 0.0 Jul-23 1.0 0.0 0.1 0.2 0.2 0.0 0.0 0.2 1.0 1.0 1.2 0.6 1.2 1.1 1.0 1.0 1.0 0.0 Jul-23 1.0 0.1 0.2 0.2 0.0 0.0 0.2 1.0 1.0 1.2 0.6 1.0 1.2 0.6 1.0 1.0 1.2 0.6 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	Jan-23	0.5	0.9	0.0	1.4	0.5	2.9	-0.1	0.3	-0.6	-6.0	0.1	-1.8	0.0
Apr-23 0.1 0.2 -0.1 -0.1 1.2 0.4 0.2 0.6 -1.8 0.0 -1.9 -0.7 -0.1 May-23 -0.3 -0.1 -0.4 0.6 -0.6 0.0 -0.9 -0.5 -4.9 0.3 -1.8 -0.3 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	Feb-23	0.1	0.0	0.3	0.1	-0.3	-1.2	-0.1	0.0	-1.5	4.7		2.6	0.1
May-23	Mar-23	-0.3	-0.5	-0.2	0.3	-1.6	-1.4	0.7	0.6	3.2	-3.1	2.3	-0.2	0.0
Jun-23 0.7 0.2 0.0 0.5 0.7 0.5 2.7 3.2 2.1 -1.3 1.3 1.6 0.0 Jul-23 -0.5 -0.4 -0.1 -0.4 -0.4 -0.0 -1.0 -1.2 0.6 -0.2 -1.1 -0.5 0.1 Aug-23 0.0 0.1 0.2 0.2 0.0 0.2 -0.3 0.5 0.7 2.9 -1.6 -2.3 0.1 Sep-23 0.0 0.0 -0.3 0.6 -0.4 0.0 -0.1 -0.4 2.9 -3.0 1.3 0.0 0.1 Oct-23 -0.5 -0.3 0.0 -0.8 0.0 -0.8 -1.4 -1.3 -4.8 -1.7 0.9 0.0 0.0 Nov-23 0.2 0.2 0.1 0.2 0.3 0.8 0.5 0.8 -0.2 0.5 -1.0 0.0 0.0 Dec-23 -0.1 -0.1 0.4 -0.5 <td>Apr-23</td> <td>0.1</td> <td>0.2</td> <td>-0.1</td> <td>-0.1</td> <td>1.2</td> <td>0.4</td> <td>0.2</td> <td>0.6</td> <td>-1.8</td> <td>0.0</td> <td>-1.9</td> <td>-0.7</td> <td>-0.1</td>	Apr-23	0.1	0.2	-0.1	-0.1	1.2	0.4	0.2	0.6	-1.8	0.0	-1.9	-0.7	-0.1
Jul-23 -0.5 -0.4 -0.1 -0.4 -0.4 -0.0 -1.0 -1.2 0.6 -0.2 -1.1 -0.5 0.1 Aug-23 0.0 0.1 0.2 0.2 0.0 0.2 -0.3 -0.5 0.7 2.9 -1.6 -2.3 0.1 Sep-23 0.0 0.0 -0.3 0.6 -0.4 0.0 -0.1 -0.4 2.9 -3.0 1.3 0.0 0.1 Oct-23 -0.5 -0.3 0.0 -0.8 0.0 -0.8 -1.4 -1.3 -4.8 -1.7 0.9 0.0 0.0 Nov-23 0.2 0.2 0.1 0.2 0.3 0.8 0.5 0.8 -0.2 0.5 -1.0 0.0 0.0 Dec-23 -0.1 -0.1 -0.4 -0.5 -1.3 0.3 0.5 0.8 0.1 -1.8 -0.4 0.0 0.0 Jan-24 0.2 0.2 0.5 1.2	May-23	-0.3	-0.1	-0.4	0.6	-0.6	0.0	-0.9	-0.5	-4.9	0.3	-1.8	-0.3	0.0
Jul-23 -0.5 -0.4 -0.1 -0.4 -0.4 -0.0 -1.0 -1.2 0.6 -0.2 -1.1 -0.5 0.1 Aug-23 0.0 0.1 0.2 0.2 0.0 0.2 -0.3 -0.5 0.7 2.9 -1.6 -2.3 0.1 Sep-23 0.0 0.0 -0.3 0.6 -0.4 0.0 -0.1 -0.4 2.9 -3.0 1.3 0.0 0.1 Oct-23 -0.5 -0.3 0.0 -0.8 0.0 -0.8 -1.4 -1.3 -4.8 -1.7 0.9 0.0 0.0 Nov-23 0.2 0.2 0.1 0.2 0.3 0.8 0.5 0.8 -0.2 0.5 -1.0 0.0 0.0 Dec-23 -0.1 -0.1 -0.4 -0.5 -1.3 0.3 0.5 0.8 1.1 -1.8 -0.4 0.0 0.0 Jan-24 0.2 0.2 0.5 1.2	Jun-23	0.7	0.2	0.0	0.5	0.7	0.5	2.7	3.2	2.1	-1.3	1.3	1.6	0.0
Aug-23 0.0 0.1 0.2 0.2 0.0 0.2 -0.3 -0.5 0.7 2.9 -1.6 -2.3 0.1 Sep-23 0.0 0.0 -0.3 0.6 -0.4 0.0 -0.1 -0.4 2.9 -3.0 1.3 0.0 0.1 Oct-23 -0.5 -0.3 0.0 -0.8 0.0 -0.8 -1.4 -1.3 -4.8 -1.7 0.9 0.0 0.0 Nov-23 0.2 0.2 0.1 0.2 0.3 0.8 0.5 0.8 -0.2 0.5 -1.0 0.0 0.0 Dec-23 -0.1 -0.1 -0.4 -0.5 -1.3 0.3 0.5 0.8 1.1 -1.8 -0.4 0.0 0.0 Jan-24 0.2 0.2 -0.2 0.5 1.2 -0.5 -0.2 0.0 0.5 -1.3 -2.2 0.0 0.2 Feb-24 0.0 0.0 0.3 0.0 -0.3 0.6 -0.2 -0.1 -1.1 0.7 0.8 0.0 0.3	Jul-23	-0.5	-0.4	-0.1	-0.4	-0.4	-2.0	-1.0	-1.2	0.6	-0.2		-0.5	0.1
Sep-23 0.0 0.0 -0.3 0.6 -0.4 0.0 -0.1 -0.4 2.9 -3.0 1.3 0.0 0.1 Oct-23 -0.5 -0.3 0.0 -0.8 0.0 -0.8 -1.4 -1.3 -4.8 -1.7 0.9 0.0 0.0 Nov-23 0.2 0.2 0.1 0.2 0.3 0.8 0.5 0.8 -0.2 0.5 -1.0 0.0 0.0 Dec-23 -0.1 -0.1 0.4 -0.5 -1.3 0.3 0.5 0.8 1.1 -1.8 -0.4 0.0 0.0 Jan-24 0.2 0.2 0.2 0.5 1.2 -0.5 -0.2 0.0 0.5 -1.3 -2.2 0.0 0.2 Feb-24 0.0 0.0 0.3 0.0 -0.3 0.6 -0.2 -0.1 -1.1 0.7 0.8 0.0 0.3	Aug-23				0.2				-0.5	0.7	2.9			
Oct-23 -0.5 -0.3 0.0 -0.8 0.0 -0.8 -1.4 -1.3 -4.8 -1.7 0.9 0.0 0.0 Nov-23 0.2 0.2 0.1 0.2 0.3 0.8 0.5 0.8 -0.2 0.5 -1.0 0.0 0.0 Dec-23 -0.1 -0.1 0.4 -0.5 -1.3 0.3 0.5 0.8 1.1 -1.8 -0.4 0.0 0.0 Jan-24 0.2 0.2 0.2 0.5 1.2 -0.5 -0.2 0.0 0.5 -1.3 -2.2 0.0 0.0 Feb-24 0.0 0.0 0.3 0.0 -0.3 0.6 -0.2 -0.1 -1.1 0.7 0.8 0.0 0.3	Sep-23													
Nov-23 0.2 0.2 0.1 0.2 0.3 0.8 0.5 0.8 -0.2 0.5 -1.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	Oct-23													
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Feb-24 0.0 0.0 0.3 0.0 -0.3 0.6 -0.2 -0.1 -1.1 0.7 0.8 0.0 0.3	Jan-24													
	Feb-24													
	Mar-24	0.1	0.1	0.2	-0.1	0.0	0.3	0.1	0.0	0.8	0.2			

Health warning

The NIESR GDP Tracker provides a rolling monthly forecast for GDP growth. Our first estimate of growth for any particular quarter starts in the first month of that quarter and is then updated each month until the first official release in the second month of the following quarter. So, for example, our first estimate of growth in the first quarter of 2020 was published in January and then updated four times (in February, March, April, and May) before the ONS published its first estimate for the first quarter of 2020 in May 2020. In other words, we publish four estimates of GDP for any particular quarter before the official release and change them as new evidence becomes available. Figure 9 shows how our short-term forecasts for recent quarters have changed as new information has become available.

Figure 10 - Evolution of the NIESR quarterly GDP forecast (3 months on previous 3 months, per cent)



NIESR's short-term predictions of monthly GDP growth are based on bottom-up analysis of recent trends in the monthly sub-components of GDP. These predictions are constructed by aggregating statistical model forecasts of ten sub-components of GDP. The statistical models that have been developed make use of past trends in the data as well as survey evidence to build short-term predictions of the sub-components of monthly GDP. These provide a statistically-based guide to current trends based on the latest available data. Each month these predictions are updated as new ONS data and new surveys become available. Table 2 shows the growth in each sector for the three months to January, compared with the previous three months, against the forecast for each in our February GDP Tracker.

Table 2 - 3-month-on-3-month growth to January (per cent)

	GDP	Index of Services	Index of Production		0	Index of Construction
Forecast	-0.1	0.0	-0.2	0.1	-2.8	0.0
Outturn	-0.1	0.0	-0.1	0.3	-3.3	0.0

It is important to stress that the timelier NIESR guide to quarterly GDP growth is less reliable than the subsequent ONS data releases as its data content is lower, particularly for estimates of the current quarter which in some months will be based only on forecasts rather than hard data. To mitigate this issue, NIESR provides a guide to average errors based on past performance. NIESR also provides clear guidance on how the latest news has caused its estimates of GDP growth in the current and preceding quarter to change and thereby quantify how the short-term outlook is being affected by recent data releases (see, e.g., Figure 5).

As the bottom-up methodology for producing estimates of GDP growth for the current and preceding quarters is still relatively new, we do not yet have a long track record of estimates produced by this approach. To check how our methodology would work in real time we went back to late 2016 to produce judgement-free forecasts of GDP growth in future months based on the monthly data series available for the components in November 2016 (this was the earliest vintage then available on the ONS website) and in each subsequent three months. These are shown in Table 3, which has been updated to include estimates since we started producing the GDP Tracker in July 2018. We calculate the forecast quarter-on-quarter growth rates for the current quarter and compare these to the ONS first estimates of quarterly growth. The average absolute error for the quarters considered was 0.22 percentage points. The largest error was for the second quarter of 2020 when our GDP tracker in May pointed to growth of 22.8 per cent, 2.4 percentage points lower than the ONS first estimate of GDP growth.

Table 3 - Forecast Error Analysis: Quarterly GDP growth (per cent)

Quarter	ONS first estimate	ONS latest estimate	NIESR nowcast*	Error in NIESR nowcast**	ONS latest – first
2016Q4	0.6	0.7	0.7	-0.1	0.1
2017Q1	0.3	0.6	0.6	-0.3	0.3
2017Q2	0.3	0.3	0.4	-0.1	0.0
2017Q3	0.4	0.3	0.4	0.0	-0.1
2017Q4	0.5	0.4	0.4	0.1	-0.1
2018Q1	0.1	0.0	0.5	-0.4	-0.1
2018Q2	0.4	0.5	0.0	0.4	0.1
2018Q3	0.6	0.6	0.5	0.1	0.0
2018Q4	0.2	0.2	0.4	-0.2	0.0
2019Q1	0.5	0.6	0.2	0.3	0.1
2019Q2	-0.2	-0.2	0.3	-0.5	0.0
2019Q3	0.3	0.4	0.2	0.1	0.1
2019Q4	0.0	0	0.2	-0.2	0.0
2020QI	-2.0	-2.1	0.2	-2.2	-0.1
2020Q2	-20.4	-20.4	-22.8	2.4	0.0
2020Q3	15.5	16.1	15.0	0.5	0.6
2020Q4	1.0		-2.2	3.2	
2021QI			-3.8		
Average absolute error				0.22	0.08

Notes for Editors:

For further information please contact the NIESR Press Office: press@niesr.ac.uk or Luca Pieri on 020 7654 1954 / l.pieri@niesr.ac.uk

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