

NIESR

Monthly GDP Tracker

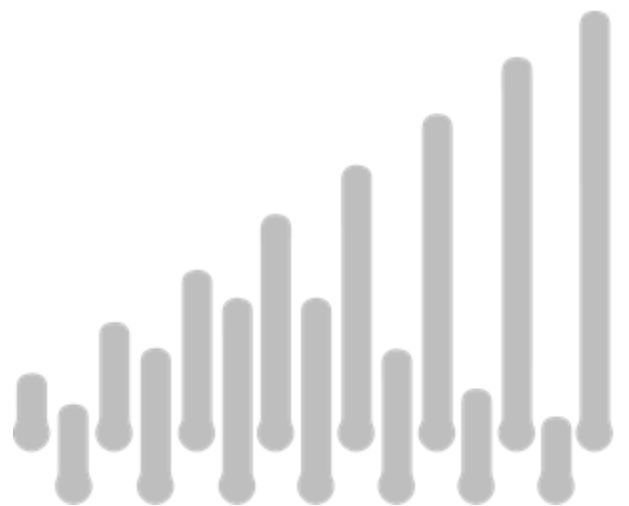
Unexpected March downturn brings recession closer

Rory Macqueen

12th May 2022

“March’s deterioration in consumer confidence translated into a sharp fall in retail and wholesale, which was exacerbated by continuing supply-chain problems in the motor industry. Offsetting this, the continuing normalisation of GP and hospital activities cancelled out falling Covid-related activity to mean that the health sector returned to month-on-month growth. Falling business investment in the first estimate for the first quarter is a concern: with the government’s tax ‘super-deduction’ expiring in under a year we still see little sign of a recovery from the Covid shock.”

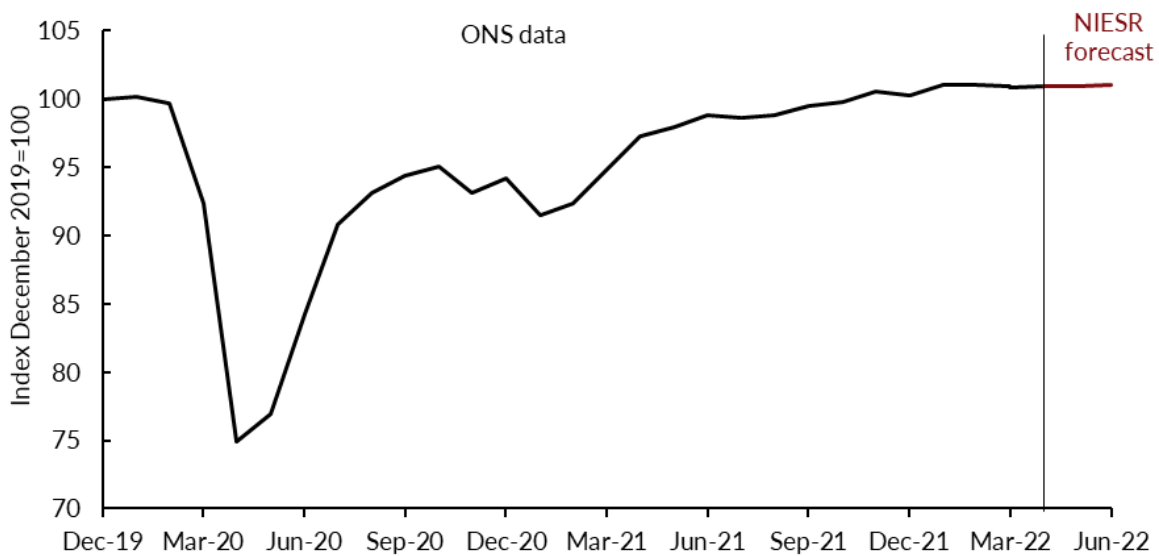
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Main points

- GDP grew by 0.8 per cent in the first quarter: less than the 1.0 per cent we forecast a month ago, predominantly due to weaker services growth. Supply-chain problems in the motor industry contributed significantly but there was weak growth in much of the retail sector.
- With consumer confidence indicators continuing to weaken we expect growth to be largely flat in April and close to flatlining in the second quarter overall.
- The first estimate of GDP expenditure components for the first quarter was for a decline in business investment of 0.5 per cent. With uncertainty from the war in Ukraine likely to weigh on investment further, we may see yet further delays to recovery from the Covid shock, reducing the capital stock and supply capacity yet further.

Figure 1 - UK GDP



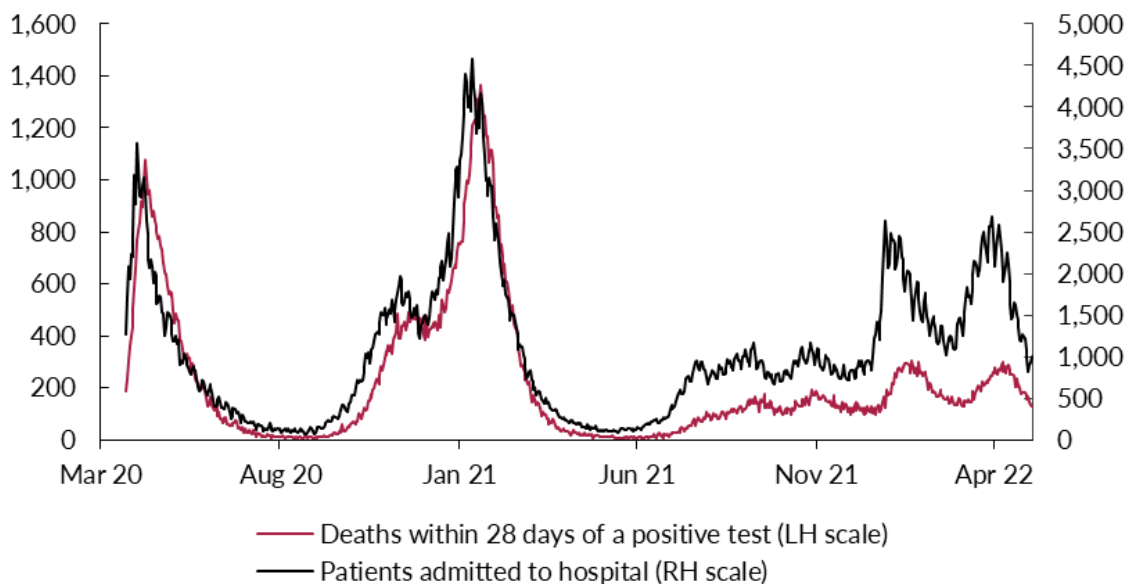
Economic setting

NIESR’s Spring Economic Outlook was [published](#) on 10th May. We forecast 3.5 per cent growth for 2022, with CPI inflation reaching 8.3 per cent in the fourth quarter. The UK faced above-target and rising inflation even before the war in Ukraine began, with consumer confidence indicators turning downwards though businesses appear to be more optimistic.

Covid-19 cases and hospitalisations have fallen sharply again after the latest wave centred on April.

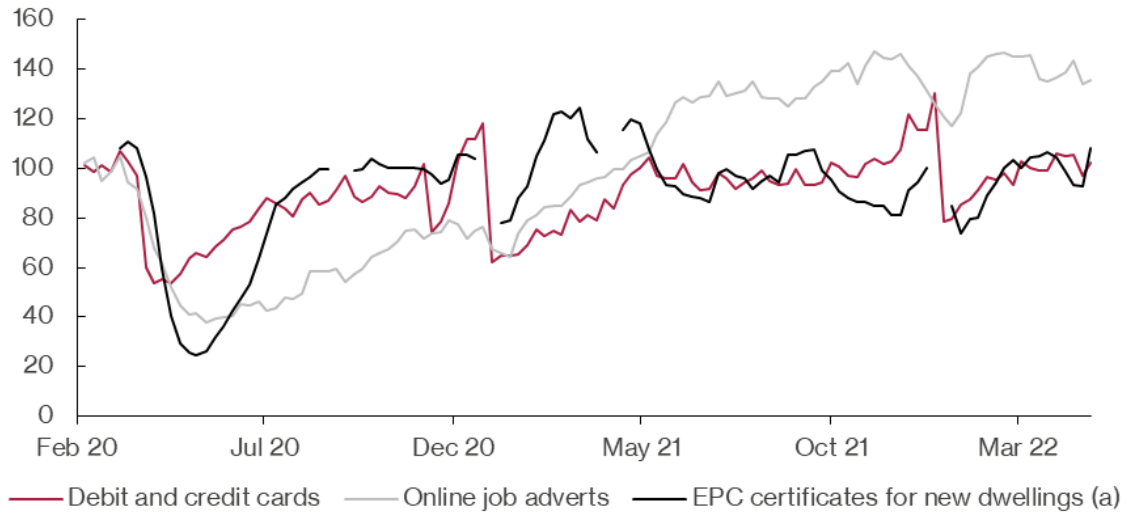
Figure 2.1 – UK daily Covid-19 statistics

Source: Data.gov.uk. See coronavirus.data.gov.uk for further information.



High frequency indicators suggest that vacancies remain close to record levels. Card spending and new dwelling completions are at a similar level to last summer (Figure 2.2).

Figure 2.2 – Spending and hiring indicators



Notes: (a) England and Wales. Debit and credit cards (CHAPS-based): 100 = February 2020, percentage change on a backward looking seven-day rolling average, non-seasonally adjusted, nominal prices. Job adverts: change from the same week in 2019. EPC certificates: change from the same week in 2019/2020, four-week rolling average, adjusted for timing of holidays.
Source: ONS, BoE, Adzuna, MHCLG, NIESR.

News in latest ONS data

The monthly GDP data for March were slightly weaker than we forecast in April, GDP falling by 0.1 per cent rather than growing by 0.1 per cent month-on-month, and growing by 0.8 per cent on a rolling three-month basis (see Figure 3).

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

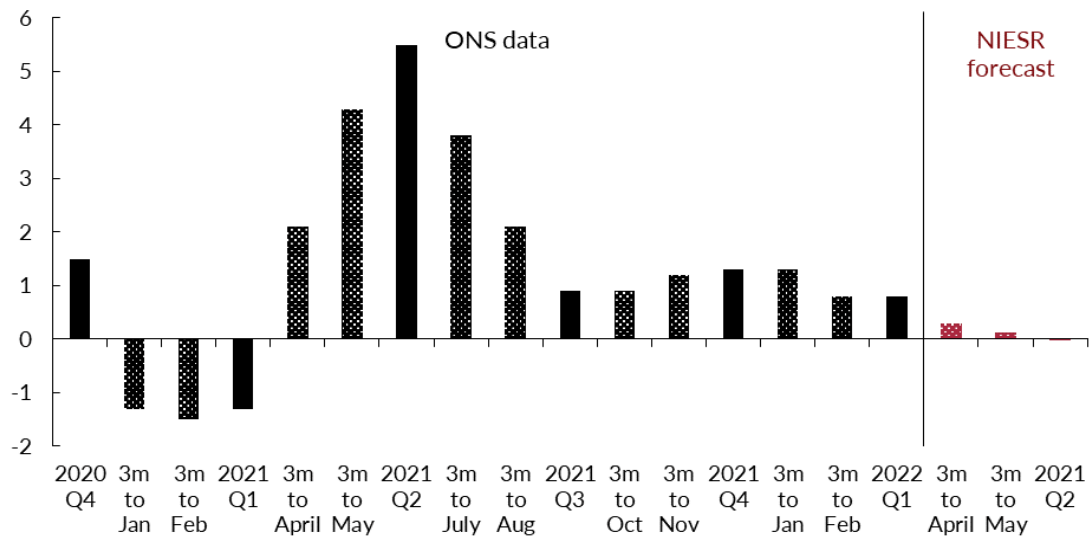


Figure 4 shows how our short-term forecasts for recent quarters have changed as new information has become available.

Figure 4 - Evolution of the NIESR quarterly GDP forecast (3 months on previous 3 months, per cent)

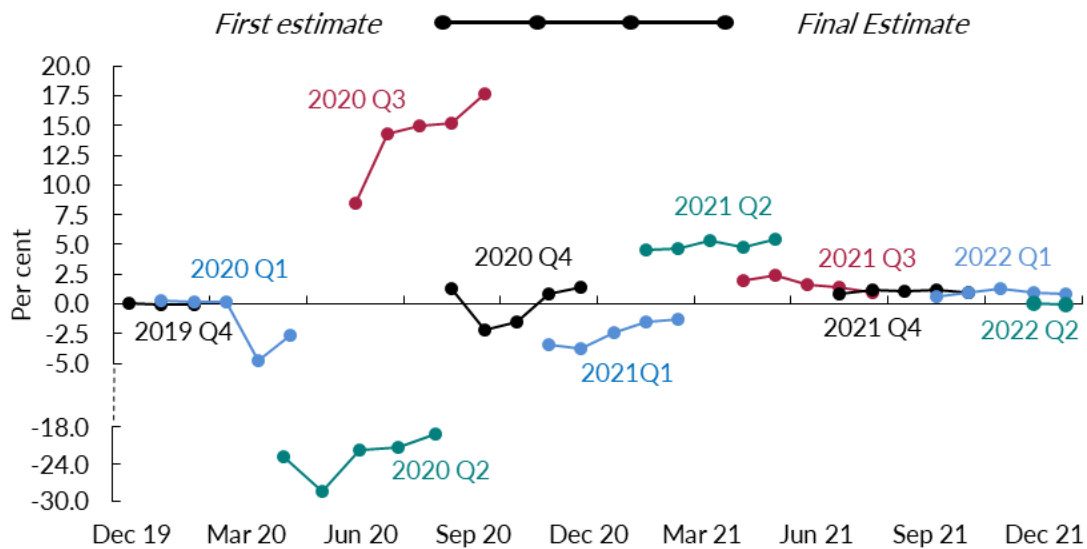


Figure 5 shows a heat map of the data surprises across sectors in the monthly data, relative to last month's GDP Tracker, highlighting the sectors where the surprises are large relative to the volatility of the output data. This month, there was a large negative surprise in electricity but positive surprises in extraction and 'government and other services' (which includes health, education, arts and recreation).

Figure 5 – Surprises in monthly data

	02/21	03/21	04/21	05/21	06/21	07/21	08/21	09/21	10/21	11/21	12/21	01/22	02/22	03/22
Business services and finance	0.2	0.8	-0.5	-0.2	0.7	-1.0	-0.2	0.7	-0.2	0.3	0.2	0.1	0.0	-0.2
Government	-0.2	0.7	0.7	0.0	-0.3	-0.3	-0.7	0.7	0.3	0.2	0.0	0.0	-0.3	0.4
Distribution, Hotels and Restaurants	0.4	-0.2	1.1	-0.7	-0.2	-0.6	0.2	-0.2	0.0	0.0	-0.3	0.2	-0.1	-0.3
Transport, Storage and Communication	-0.2	0.1	0.3	-0.1	0.1	0.2	0.1	-0.3	0.4	0.4	0.3	0.7	0.0	-0.2
Manufacturing	0.7	-0.1	-0.5	0.0	-0.4	-0.1	-0.3	-0.2	0.0	0.2	0.2	0.1	-0.3	-0.1
Electricity	0.3	-0.3	1.0	1.9	-1.6	-0.9	-1.5	0.0	-0.9	-0.4	-0.1	0.1	0.0	-0.7
Extraction	-0.9	0.6	-2.9	0.0	-2.4	3.0	1.7	-1.3	-0.9	-0.6	-0.7	0.1	-0.5	0.4
Water Supply, Sewerage, Waste Management	1.2	0.5	-0.8	-0.3	1.1	0.3	-0.4	-0.6	0.9	1.5	0.5	-0.4	-0.6	-0.3
Construction	0.7	0.3	-0.2	-0.2	-0.2	-0.2	-0.2	0.3	-0.3	0.3	0.1	0.4	-0.1	0.2
Agriculture	1.3	0.4	-0.5	-0.2	0.3	0.6	0.7	0.3	0.0	-0.2	-0.2	0.0	0.0	0.0

Note: Cells show forecast errors as a fraction of the standard deviation of errors for each series. Green cells are greater than expected, red cells are less than expected.

Table 1 shows the growth in each sector for the three months to February, compared with the previous three months, against the forecast for each in our April GDP Tracker.

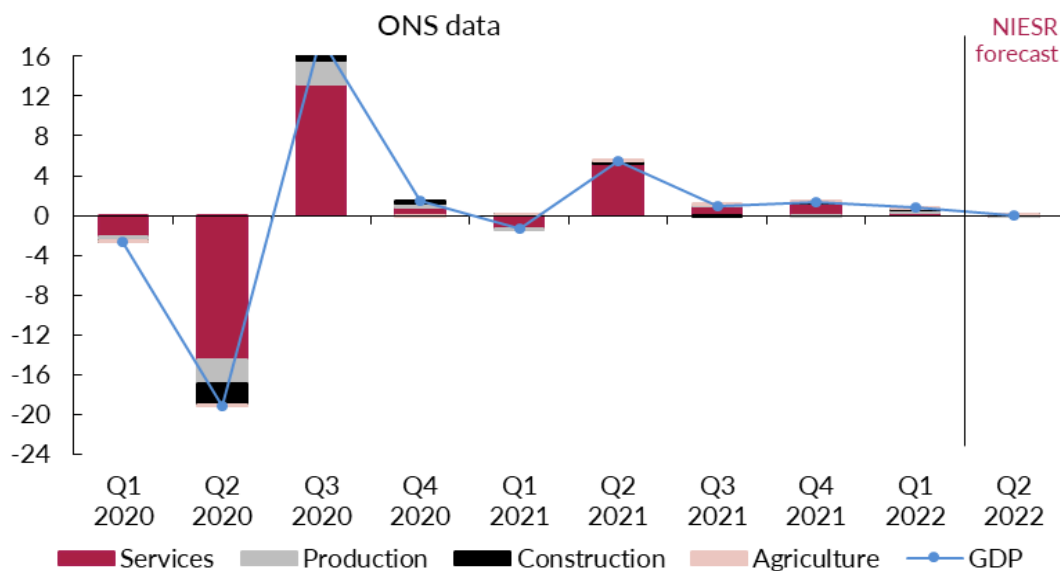
Table 1 - 3-month-on-3-month growth to March

	GDP	Index of Services	Index of Production	Manufacturing	Mining and Quarrying	Index of Construction
Forecast	1.0	0.8	0.9	1.4	-3.1	2.7
Outturn	0.8	0.4	1.2	1.3	-0.2	3.8

Sectoral detail

We forecast zero quarter-on-quarter growth in GDP in the second quarter of 2022.

Figure 6 - Contributions to quarterly GDP growth (percentage points)

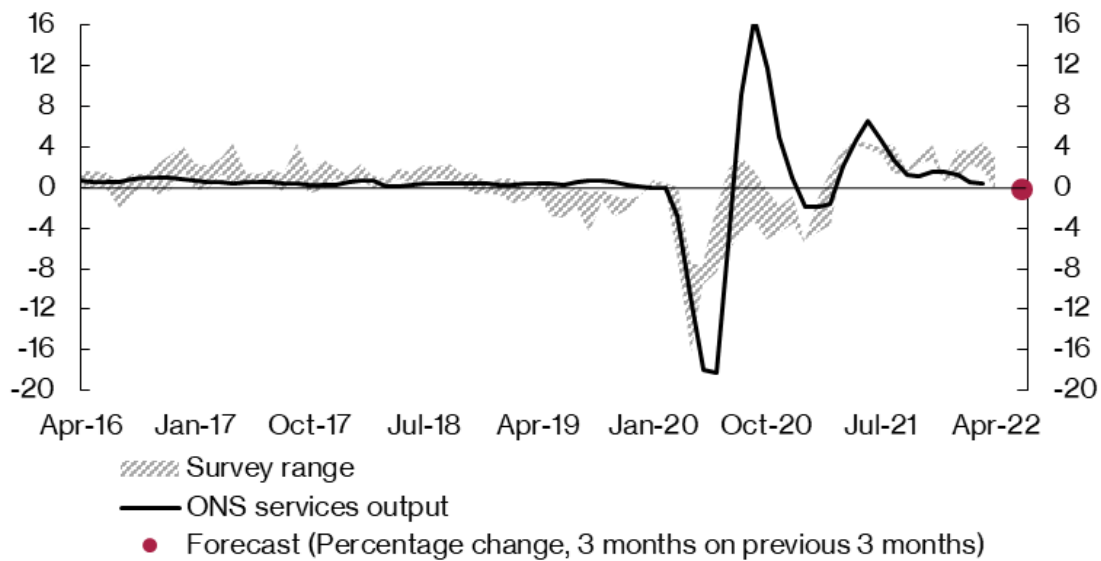


Services (80 per cent of GDP)

The survey balances point to slight weakening in the growth rate of activity in April, as shown by the swathe of survey indicators in figure 7. The headline business activity balance in the IHS Markit/CIPS UK services PMI registered 58.9, down from 62.6 in March but still markedly above 50. Internationally, the JPMorgan Global Services Business Activity Index fell to 51.9 from 53.4 in March.

Based on recent developments we expect service sector activity to fall by 0.1 per cent in the second quarter.

Figure 7 - 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.

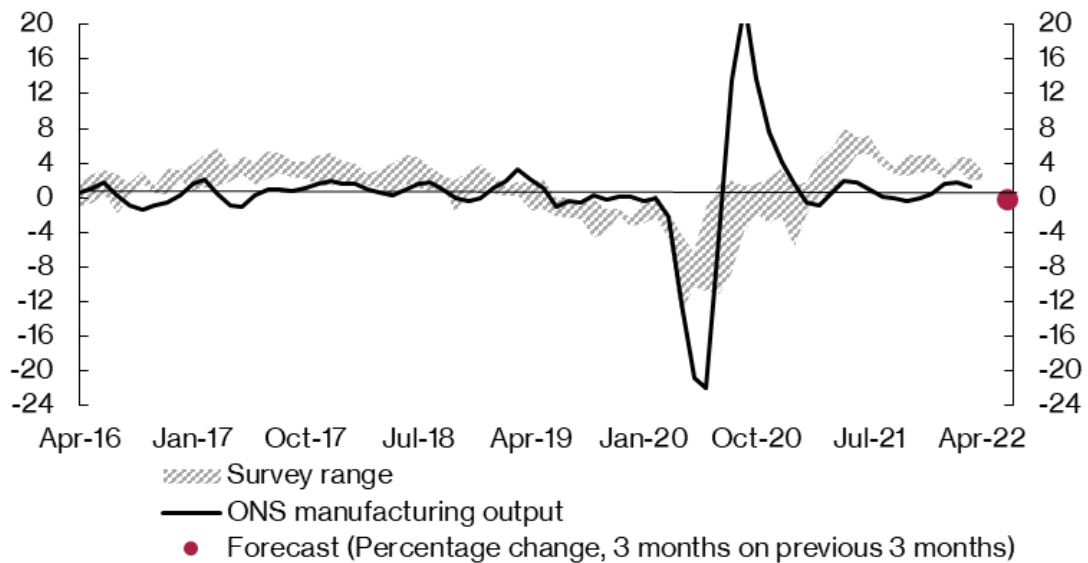
Production (14 per cent of GDP)

We forecast that production sector output will decline by 0.1 per cent in the second quarter of 2022, 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; electricity gas, steam and air conditioning; water supply and sewerage; and oil and gas extraction. The largest of these sectors is manufacturing, accounting for 10 per cent of GDP.

Manufacturing (10 per cent of GDP)

The IHS Markit/CIPS UK manufacturing PMI rose slightly to 55.8 in April, from 55.2 in March. The JPMorgan Global Manufacturing Output PMI fell slightly to 52.2 from 52.9 in March. Our forecast for the second quarter of 2022 is for manufacturing to decline by 0.1 per cent (Figure 8).

Figure 8 - ONS manufacturing 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.

Mining and quarrying (1 per cent of GDP)

Mining and quarrying (extraction) is a small but erratic component of industrial production that can have an influence on overall GDP growth. We forecast a rise of 0.4 per cent in the second quarter of 2022.

Construction (6 per cent of GDP)

The IHS Markit/CIPS construction PMI survey registered 58.2 in April, down from 59.1 in March. We expect construction output to grow by 1.0 per cent in the second quarter of 2022.

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 is published in January and will then be updated four times (in February, March, April and May) before the ONS publishes 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.

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.

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.

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 2020Q2 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 (%)

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
2020Q1	-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	
2021Q1			-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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