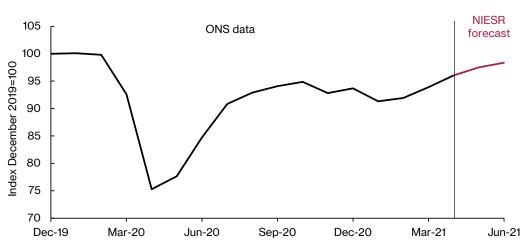


Friday, 11th June 2021

niesr.ac.uk

Strong start to second quarter driven by re-opening

Figure 1 - UK GDP



Main points

- Another month of rapid service sector growth in April was driven by the re-opening of sectors affected by Covid-19 restrictions, resulting in a 2.3 per cent growth in monthly GDP almost in line with our May Tracker forecast. We expect the recovery to have continued in May and June, forecasting monthly growth of 1.5 per cent and 0.9 per cent respectively.
- Expansion in April was driven by the retail and education sectors, with manufacturing and construction declining. We expect retail and hospitality to contribute significantly to growth in May.
- This leads us to slightly revise up our forecasts for the second quarter of 2021 to 5.3 per cent, the fastest quarterly growth rate since the summer of last year and the initial recovery phase after the Covid-19 shock.
- While the lifting of restrictions has helped return the economy overall to just 3.7 per cent below its pre-Covid peak, some sectors remain badly affected. In April hospitality was still 40 per cent below its level in February 2020 while arts and recreation was down by more than 30 per cent. Postponing the last step of re-opening may delay the recovery in arts and recreation by a few weeks but, if it helps avoid a third wave of infections, it could contribute to sustained recovery in the second half of the year.

"Like March, April was a month of rapid growth in services output, as anticipated, driven by the re-opening of non-essential retail, outdoor hospitality and near-full attendance in schools. May will follow a similar pattern, as further restrictions are lifted, as will June if the final step of the roadmap goes to plan. But falls in construction and production, which were less affected by the 2021 lockdown, remind us that our focus should now be on the prospects for the economy in the second half of the year, after temporary re-opening effects have ceased to provide strong monthly increases."

Rory Macqueen

Principal Economist - Macroeconomic Modelling and Forecasting

Economic setting

Economic data in recent weeks continue to be strong, suggesting that the lifting of Covid-19 restrictions has continued to drive changes in economic activity through the spring. NIESR's full-year 2021 <u>forecasts</u> were revised up to 5.7 per cent in early May, from 3.4 per cent in February, driven by the expectation of a smaller fall in first-quarter GDP than anticipated earlier in the year. This reflected the success of lockdown and vaccinations in reducing the spread of Covid-19 in the UK.

In the first quarter of 2021, overall negative growth of 1.5 per cent was made up of falls in household consumption and investment, partly offset by growth in government consumption and net exports, the latter driven not by a rise in exports but by a larger fall in imports. Renewed concern about the emergence of new Covid-19 variants looks like it may delay the lifting of some remaining restrictions, but the return of indoor hospitality and accommodation will have provided a boost to output in May.

Confidence about the future is likely to play a big role in the near-term path for inflation, which reached 1.5 per cent last month. Our <u>CPI tracker</u> forecasts a rise to close to the 2 per cent target later this year, but there remain upside risks to that.

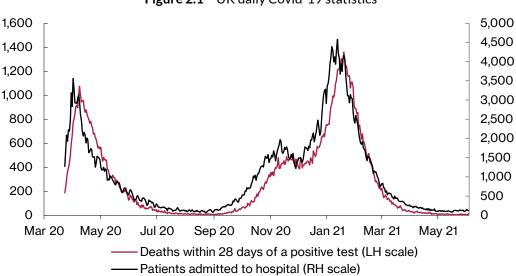


Figure 2.1 - UK daily Covid-19 statistics

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

10 Percentage change from baseline 0 -10 -20 -30 -40 -50 -60 -70 -80 -90 Feb 20 May 20 Aug 20 Nov 20 Feb 21 May 21 Retail and recreation Workplaces

Figure 2.2 - Google Mobility Indicators

Source: Google, NIESR. Note: Baseline is median value for the day of the week Jan 3 - Feb 6 2020. Seven-day rolling average.

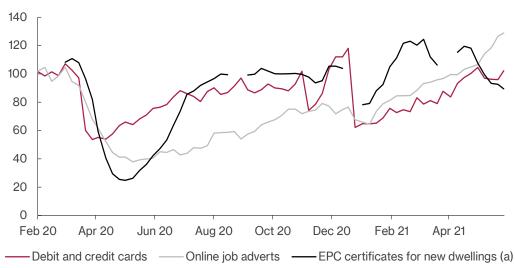


Figure 2.3 - Spending and hiring indicators.

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.

Covid-19 deaths and infections have continued to fall in the past month but there remain localised concerns. The <u>NIESR Covid Tracker</u> estimates that, up to the end of the sample period on 28 May, the R-number was 0.80-1.00 for Bolton and 0.75–1.10 for Bedford. Blackburn and Darwen was the only area of concern, with an R number in the range 1.10 - 1.50. High frequency indicators suggest that job vacancies continued to strengthen in May, with anecdotal reports of recruitment difficulties, especially among non-vaccinated age groups. Credit and debt card spending was up on April, but at a slower rate of increase than April's on March. Purchases of delayables and work-related spending slowed in May, but social spending accelerated

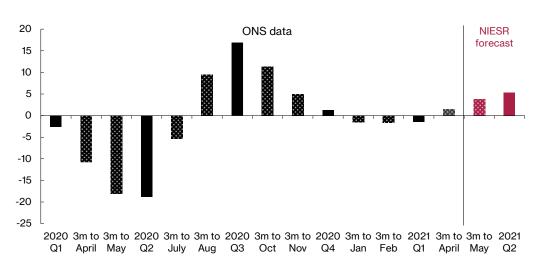
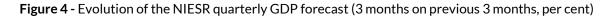


Figure 3 - UK GDP growth (3 months on previous 3 months, per cent)

News in latest ONS data

The ONS data for April were slightly stronger than we forecast in May, with GDP growing by 2.3 per cent month-on-month.

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



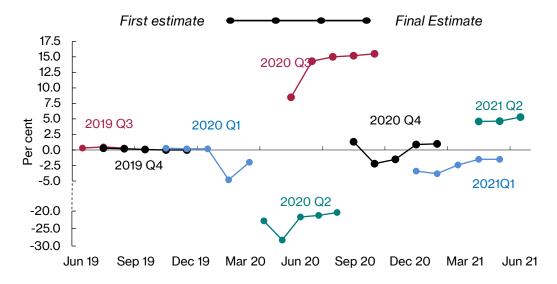


Figure 5 shows a heat map of the data surprises across sectors in the monthly data, relative to last month's GDP Tracker, highlighting the sectors where the surprises are large relative to the volatility of the output data. This month, positive surprises were seen in government and

distribution, hotels and restaurants. Negative surprises were seen in extraction, manufacturing and construction.

Figure 5 - Surprises in monthly data 04/20 05/20 06/20 07/20 08/20 09/20 10/20 11/20 12/20 01/21 02/21 03/21 04/21 Business services and finance 3.2 -1.2 -3.1 0.4 -0.7 0.6 0.5 3.0 0.6 0.5 0.2 0.6 0.1 3.5 8.0 0.4 1.3 0.6 0.9 -0.2 -1.2 -0.2 3.3 -0.5 -0.4 0.5 Government Distribution, Hotels and Restaurants 3.3 -1.6 2.9 0.7 0.7 0.0 -0.1 3.1 -1.3 -0.7 0.4 -0.2 0.7 1.9 -0.8 -0.3 -0.6 -0.5 -0.2 0.5 4.3 -0.3 1.0 -0.2 0.0 0.0 Transport, Storage and Communication 4.2 Manufacturing -2.0 1.4 0.4 0.3 1.0 0.5 0.4 1.0 -0.1 0.7 0.1 -0.6 -0.6 1.2 -0.3 -1.9 -0.1 0.2 Electricity -1.7 1.7 -0.4 -0.8 0.2 1.5 0.5 Extraction -0.5 -1.1 1.5 -0.8 -1.1 8.0-0.2 -0.7 -0.6 -0.4 -0.7 0.6 -3.8 Water Supply, Sewerage, Waste -3.6 -1.0 3.1 0.3 0.1 -0.2 1.2 0.9 0.7 -0.6 -0.9 0.2 0.1 Management Construction -3.4 -0.3 1.8 8.0 0.9 0.5 0.3 1.0 0.2 0.4 0.6 -0.7 2.2 Agriculture -3.8 2.8 -0.2 0.9 0.9 0.2 0.4 0.4 0.0 0.2 0.0 0.0 above expectation below expectation -3 0 1

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.

Sectoral detail

The economy grew by 1.5 per cent in the three months to April, compared with the three months previously, slightly stronger than the 1.3 per cent in our May Tracker forecast. This growth was mainly driven by the construction and distribution, hotels and restaurants sectors. Our forecast for the second quarter of 2021 is now for output to grow by 5.3 per cent.

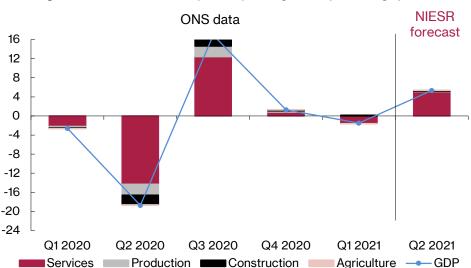
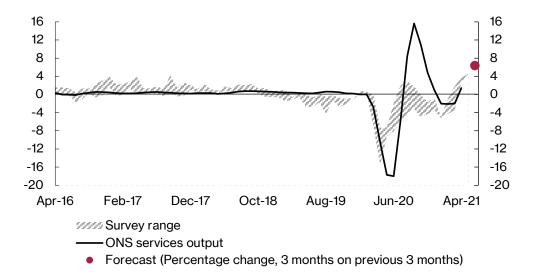


Figure 6 - Contributions to quarterly GDP growth (percentage points)

Services (80 per cent of GDP)

According to the latest ONS data, the services sector grew by 1.4 per cent in the three months to April, stronger than the 1.0 per cent we expected a month ago. All sub-sectors grew, compared with the previous three-month period, with the fastest growth in distribution, hotels and restaurants. Based on recent developments we expect service sector activity to grow by 6.4 per cent quarter-on-quarter in the second quarter of 2021 (figure 7).

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.

The survey balances point to a further pick-up in services activity in May, 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 62.9 in May, up from 61.0 in April, suggesting the fastest rate of services growth for 24 years. This was driven by higher demand following the lifting of Covid restrictions. Internationally, the JPMorgan Global Services Business Activity Index rose to 59.4 in May, the eleventh month of growth in a row.

Production (14 per cent of GDP)

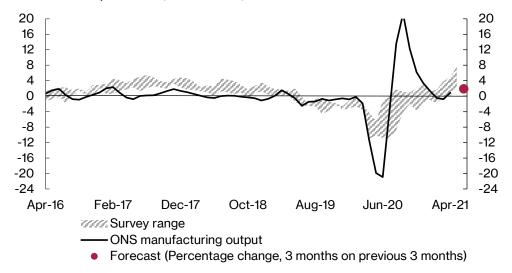
Production output grew by 0.5 per cent in the three months to April, weaker than the 1.4 per cent growth we forecast a month ago. The largest fall was in mining and quarrying, related to scheduled closures of oilfields for planned maintenance. We estimate that production will grow by 0.6 per cent in the second quarter of 2021, though output in this sector is volatile and difficult to predict on a quarterly basis with any accuracy.

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, worth 10 per cent of GDP.

Manufacturing (10 per cent of GDP)

Within production, output in the manufacturing sector grew by 0.9 per cent in the three months to April, weaker than the 0.9 per cent growth we forecast in May. Five out of the 13 manufacturing sub-sectors contracted, with the largest fall in pharmaceuticals. Our forecast for the second quarter of 2021 is for manufacturing to grow by 1.9 per cent.

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.

The IHS Markit/CIPS UK manufacturing PMI rose to 65.6 in May, up from 60.9 in April and above the previous high of July 1994, with employers citing by business confidence, the further re-opening of the UK economy and reduced issues relating to COVID-19. The PMI has signalled improvement for 12 consecutive months, though actual manufacturing output contracted in three of those months.

The JPMorgan Global Manufacturing Output rose to 56.0 in May, its highest level since April 2010.

Mining and quarrying (1 per cent of GDP)

Mining and quarrying is a small but erratic component of industrial production that can have an influence on overall GDP growth. Output continued to fall, by 17 per cent in the three months to April, though this was driven by planned maintenance closures. We now forecast a contraction of 11 in the second quarter of 2021.

Construction (6 per cent of GDP)

Output in the construction sector grew by 5.1 per cent in the three months to April, slightly slower than the 6.3 per cent we had forecast a month ago, as a result of contraction in April. Both new work and repairs & maintenance grew strongly in the three-month period to April, though both contracted in April itself. We anticipate output to grow by 3.3 per cent in the second quarter of 2021.

The IHS Markit/CIPS construction PMI survey returned to growth in May, rising to 64.2, signalling the strongest rate of output growth for just under seven years. House building (index at 66.3) was the best-performing category of construction activity.

Table 1 - Summary Table of GDP growth (2018=100)

Page				Index of Services - Components					Index of Production - Components					
The control	2018=100	GDP index			Government	Distribution,	Transport,			Electricity,		Water Supply,		Agriculture
Section Column			ocritoco					77000000	Manufacturing	air		Waste	CONSTRUCTION .	
Second	Lataet waighte	1000	796					136		conditioning		wanagement	61	7
See 196		101.6	1021					98.2					102.5	108.5
March Marc	Oct-19	101.9	102.5	101.1	102.3	102.9	106.6	98.8	98.0	103.7	99.1	99.7	100.2	108.9
March Marc	Jan-20	101.6	102.4	101.0	103.3	102.9	104.3	97.5	96.9	99.1	96.5	101.0	99.8	108.0
Section Fig. Fig. Fig. Gal Fig. Gal Ga														
March Marc	Apr-20	76.4	78.4	89.3	74.4	53.8	83.3	74.2	68.0	89.8	88.4	93.3	55.9	89.4
March 1962														
	Jul-20	92.2	92.5	93.8	87.8	94.4	95.2	92.1	89.7	99.5	94.8	100.1	89.6	93.4
	Oct-20	96.3	96.8	96.4	96.8	96.4	98.8	94.2	93.6	97.6	89.5	100.1	94.9	96.8
Section Sect														
Section Sect	Jan-21	92.7	92.5	96.0	91.3	81.7	97.5	93.2	92.0	99.6	86.8	101.5	93.8	93.5
	Apr-21	97.5	97.9	97.9	97.8	96.9	99.6	94.6	95.0	100.6	73.5	103.0	99.5	93.6
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Sept							,							
Decompose Decompose	Sep-19			1		0.2	0.8	-0.6	-0.7	-2.6	2.4	-0.5	0.2	2.4
Decoration	Oct-19	0.3	0.5	0.5	0.7	0.1	0.6	-0.8	-1.1	-1.4	3.4	-1.1	-0.6	2.3
Marco	Jan-20	-0.2	0.0	-0.1	0.8	-0.1	-1.1	-0.8	-0.8	0.8	-3.6	-0.3	-1.2	0.2
	Apr-20	-10.8	-10.5	-4.7	-13.7	-20.9	-9.1	-9.6	-11.4	-6.2	-5.9	-2.0	-16.7	-9.6
MAPPO														
Separate 16.5	Jul-20	-5.4	-5.7	-4.7	-8.9	-3.2	-5.5	-2.3	-3.6	-0.4	2.8	-0.7	-8.6	-6.8
Decomposition 110														
Description 15	Oct-20	11.3	11.0	4.0	16.8	25.1	7.2	8.7	12.3	4.0	-4.7	2.5	22.9	5.2
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Design 12	Sep-19					2.1	4.2	-2.2	-3.7	-0.1	5.6	0.7	1.4	8.6
Dec-19	Oct-19	1.2	1.7	0.4	1.9	1.7	4.9	-0.7	-1.5	5.5	-2.2	-0.2	-1.3	8.7
Jam-20														
Mar-20	Jan-20	0.6	1.2	0.9	2.7	0.9	-0.2	-2.2	-3.1	-1.8	-0.5	2.2	-1.1	4.5
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Jun-21 0.9 1.0 0.2 1.0 3.4 0.6 0.1 0.0 -11 3.6 0.3 0.3 1.2	May-21	1.5	1.7	0.2	0.3	9.2	0.0	0.5	0.5	-1.5	4.0	0.3	1.0	1.7
	Jun-21	0.9	1.0	0.2	1.0	3.4	0.6	0.1	0.0	-1.1	3.6	0.3	0.3	1.2

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 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 2, 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 points lower than the ONS first estimate of GDP growth.

Table 2 - 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
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 Chloe Ridyard on c.ridyard@niesr.ac.uk or 02076541957

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