Office for National Statistics

Article

Coronavirus and the impact on output in the UK economy: June 2020

Analysis of monthly growth for the production, services and construction industries in the UK economy between May and June 2020, highlighting the early impact from the coronavirus (COVID-19) pandemic.

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Notice

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Because of a small technical issue, we have added the missing data to the download file for Figure 5. The charts were and remain correct. We apologise for any inconvenience caused.

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1 . Main points

- The economy is in a technical recession after Quarter 2 (Apr to June) 2020 saw a record fall of 20.4%, following a significant shock since the start of the coronavirus (COVID-19) pandemic; this follows a fall of 2.2% during Quarter 1 (Jan to Mar) 2020.

- Monthly gross domestic product (GDP) rose by 8.7% during June 2020 but is 17.2% below February 2020 levels.

- Analysis of our Monthly Business Survey (MBS) returns and external data, including comments from over 10,000 businesses, has shown that businesses are increasing output as demand has increased following the easing of social distancing and lockdown measures; businesses are striving to maximise output while working within official guidelines.

- Services experienced widespread growth in June 2020, where the easing of lockdown measures, most notably in England, had the most positive impact, with nearly half of growth from the wholesale and retail trade; repair of motor vehicles and motorcycles sector.

- Manufacturing and construction saw widespread growth during June 2020, primarily because of increased demand and the recommencement of work, as businesses managed to operate while adhering to social distancing measures.

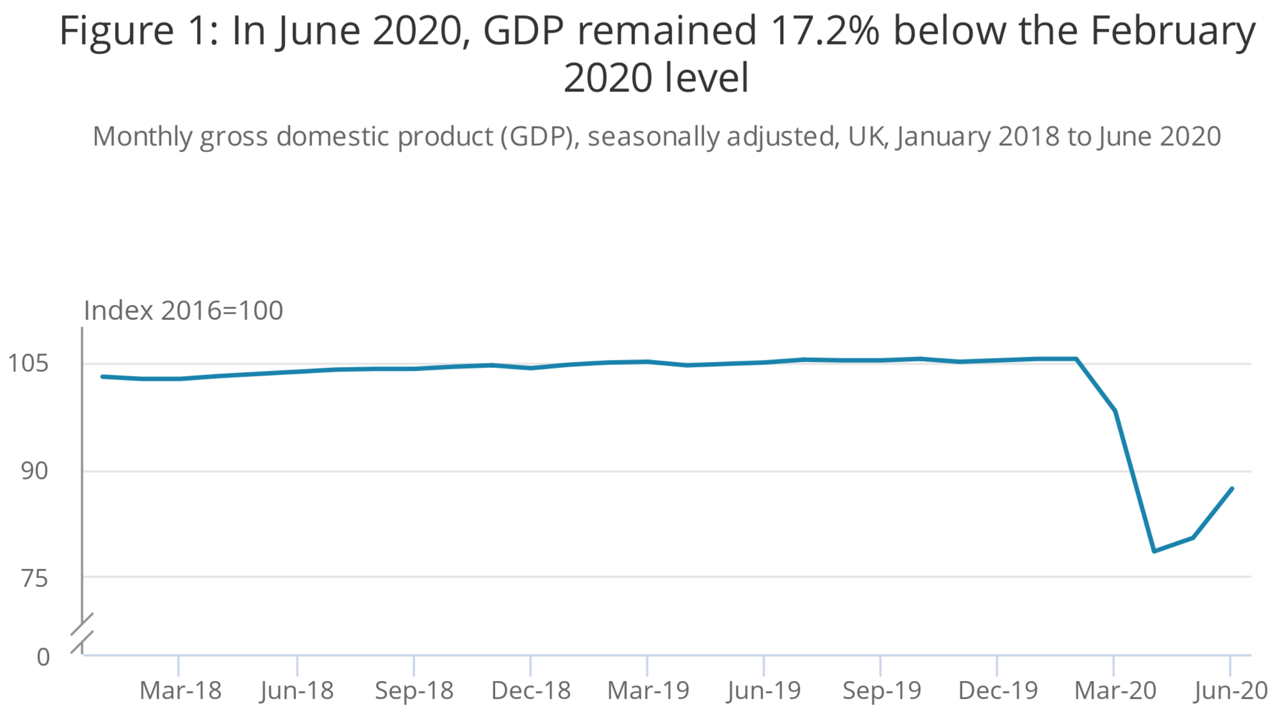
2 . The UK economy during the coronavirus (COVID-19) pandemic

This article analyses the overall impact of the coronavirus (COVID-19) pandemic on the output measure of gross domestic product (GDP) during June 2020, providing an in-depth insight of the impacts of the coronavirus on the UK economy.

Monthly GDP in June 2020 was 17.2% below the level of February 2020, having risen by 8.7% compared with May 2020 (Figure 1). The monthly rise reflects widespread growth across construction, manufacturing and services.[1] For more details, please see GDP monthly estimate, UK: June 2020.

Figure 1: In June 2020, GDP remained 17.2% below the February 2020 level

Monthly gross domestic product (GDP), seasonally adjusted, UK, January 2018 to June 2020



Source: Office for National Statistics – Monthly GDP

Notes:

1. We would advise users to be mindful of a break in the side axis when interpreting this chart.

Although the overall level of activity is well below February 2020 levels, the easing of restrictions in June increased demand and allowed many more businesses to increase output or resume some level of trading. However, some services sectors continue to be severely affected as many businesses remain closed.

The biggest impact to businesses from coronavirus (COVID-19) was the restrictions put in place regarding opening and social distancing. Some lockdown restrictions on businesses were eased during June 2020, most notably in England as part of a three-step strategy, but many restrictions were still in place during June 2020.

Figure 2: Some businesses were able to open in June as lockdown restrictions were eased, but many were still required to stay closed

Timeline of easing of lockdown restrictions, England, Northern Ireland, Scotland and Wales, 11 May 2020 to 3 August 2020

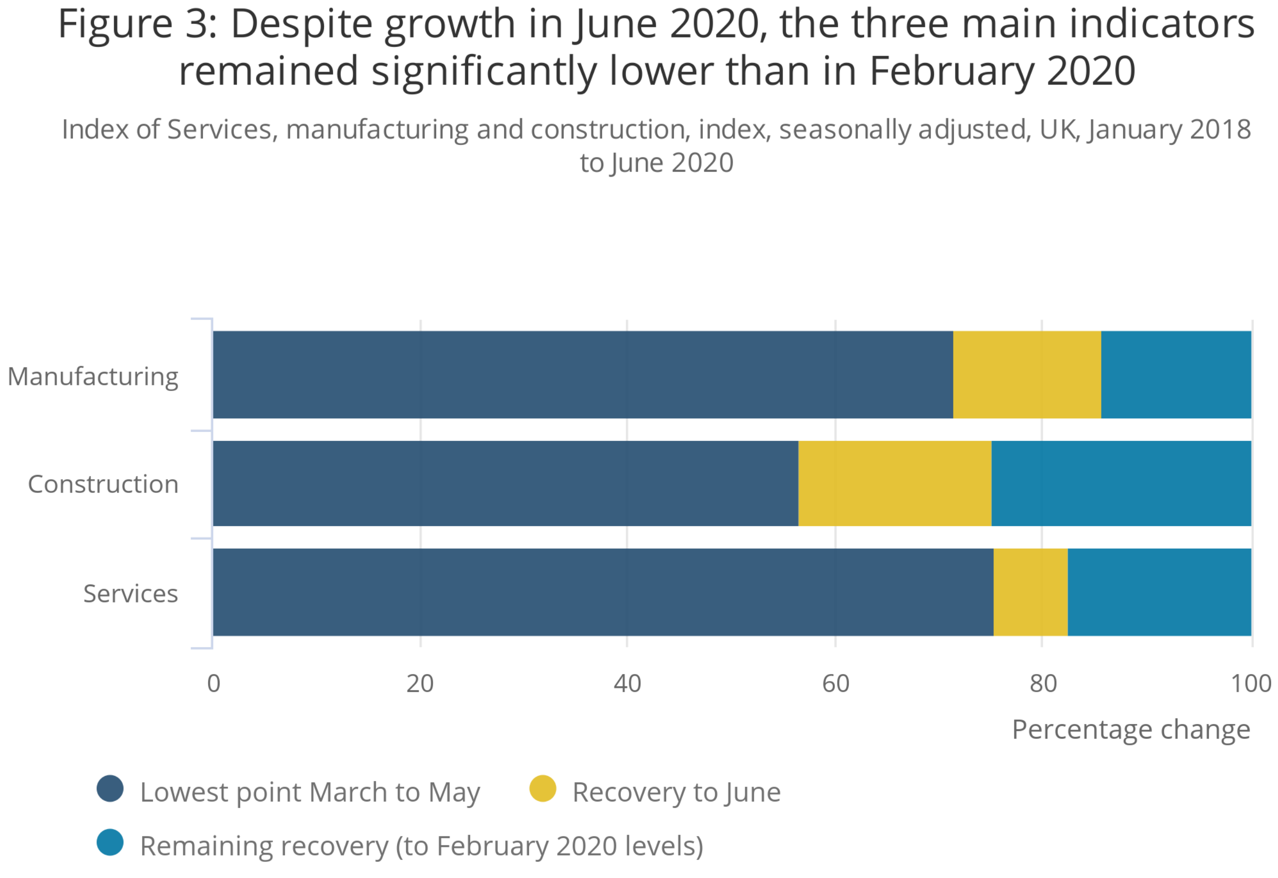
April 2020 output saw record falls in the three main indicators: services, manufacturing, and construction. Despite growth in May and June 2020, all three remained significantly lower than in February 2020.

The output of service industries remains 17.6% below the level of February 2020, growing by 7.7% in the latest month. The production industries remain 11.6% below their February 2020 level, even after growth of 9.3% in the latest month, with manufacturing declining by 14.2% since February 2020 and growing by 11.0% since May 2020. The construction industry remains 24.8% below the February 2020 level, despite a rise of 23.5% in the latest month (Figure 3).

The rate of progress for each sector in returning to February 2020 levels can be understood more easily in Figure 3 where, for example, in June services was at 82.4% of the February 2020 level, rising from its lowest point between March and May of 75.4% of the February 2020 level. The left-hand part of Figure 3 represents the lowest point, the middle the recovery so far, and the right-hand side the remaining recovery needed to return to the February 2020 levels.

Figure 3: Despite growth in June 2020, the three main indicators remained significantly lower than in February 2020

Index of Services, manufacturing and construction, index, seasonally adjusted, UK, January 2018 to June 2020

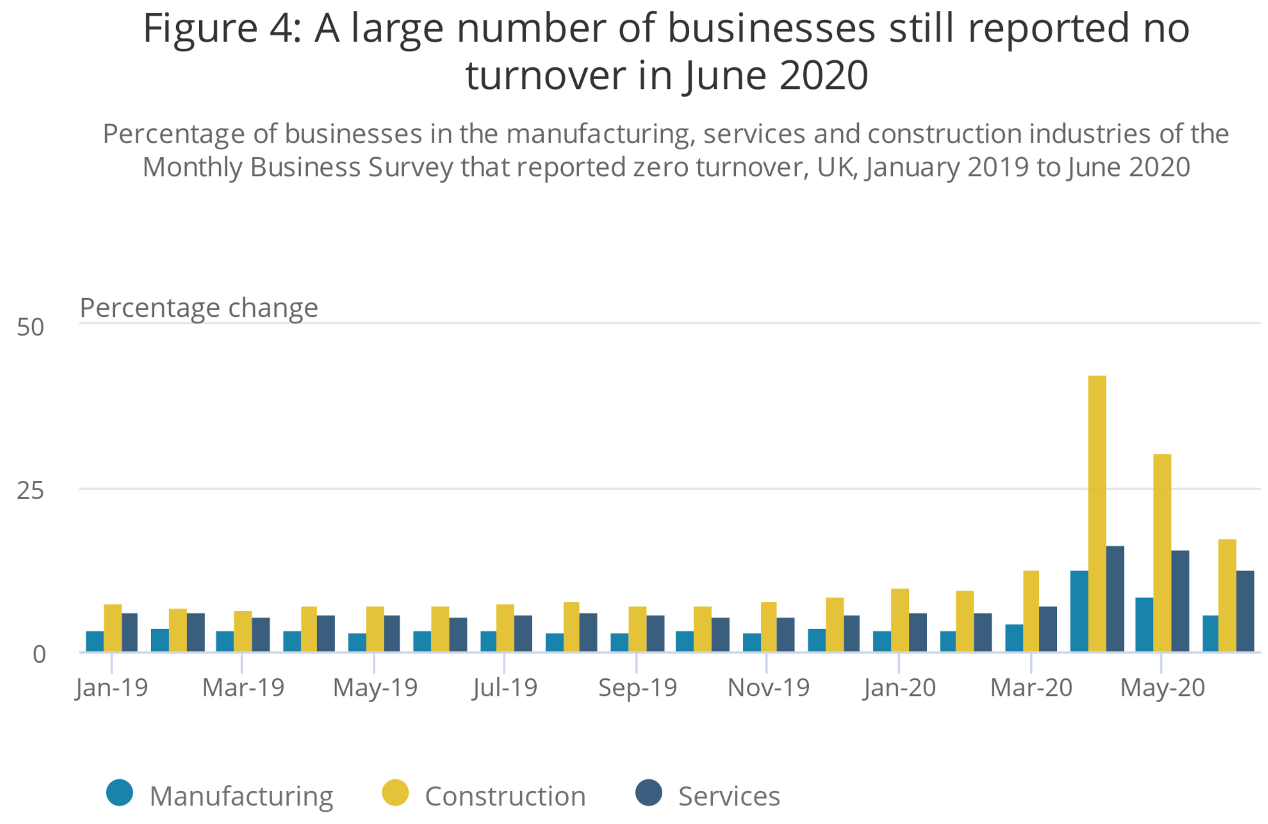


Source: Office for National Statistics – Index of Services, Index of Manufacturing and Construction output

Despite businesses reporting that they had begun trading again in June 2020, there is still a higher than usual number of businesses who are reporting no turnover (Figure 4).

Figure 4: A large number of businesses still reported no turnover in June 2020

Percentage of businesses in the manufacturing, services and construction industries of the Monthly Business Survey that reported zero turnover, UK, January 2019 to June 2020



Source: Office for National Statistics – Monthly Business Survey

This evidence is supported by our Business Impact of Coronavirus (COVID-19) Survey (BICS) Wave 7: 1 to 14 June 2020 and Wave 8: 15 to 28 June 2020.

In Wave 7 of the 5,927 businesses at a UK level and across all industries, 86% of businesses reported continuing to trade as their current trading status, while 14% reported they had temporarily closed or paused trading. In Wave 8 of the 5,527 businesses, those continuing to trade had risen slightly to 89%, while 11% reported they had temporarily closed or paused trading.

Please note, BICS is voluntary and currently unweighted, so it may only reflect the characteristics of those who responded.

Figure 5 shows the output for different industries over recent months, with most industries displaying a small pickup during June 2020.

Figure 5: Some of the industries in production and services saw a rise in June 2020, but most remained substantially below their February 2020 level

Index for various industries, seasonally adjusted, UK, January 2018 to June 2020

Data download

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- All ONS analysis, summarised in our coronavirus roundup.
- View all coronavirus data.
- Find out how we are working safely in our studies and surveys.

Notes for: The UK economy during the coronavirus (COVID-19) pandemic

1. Services comprise 79.6% of the UK economy, while production (including manufacturing) and construction comprise 13.6% and 6.1% respectively.

3 . Quarterly movement

After experiencing a significant shock since the start of the coronavirus (COVID-19) pandemic, the economy is in a technical recession, falling by 20.4% during Quarter 2 (Apr to June) 2020, compared with Quarter 1 (Jan to Mar) 2020, which fell by 2.2%. This was the largest decline since quarterly records began.

The sharp contraction during Quarter 2 2020 reflected record widespread falls in services, production and construction output. For more details please see GDP monthly estimate, UK: June 2020. Quarterly records for GDP start in 1955, services and construction 1997, and production and manufacturing 1948.

Figure 6: There was a sharp contraction in GDP in Quarter 2 2020

GDP, seasonally adjusted, UK, Quarter 1 (Jan to Mar) 1997 to Quarter 2 (Apr to June) 2020

Source: Office for National Statistics – GDP(O)

Table 1 lists the five largest quarterly falls since Quarter 1 1955.

Table 1: The five largest falls in quarterly GDP since records began
Quarterly GDP, seasonally adjusted, UK, Quarter 1 1955 to Quarter 2 2020

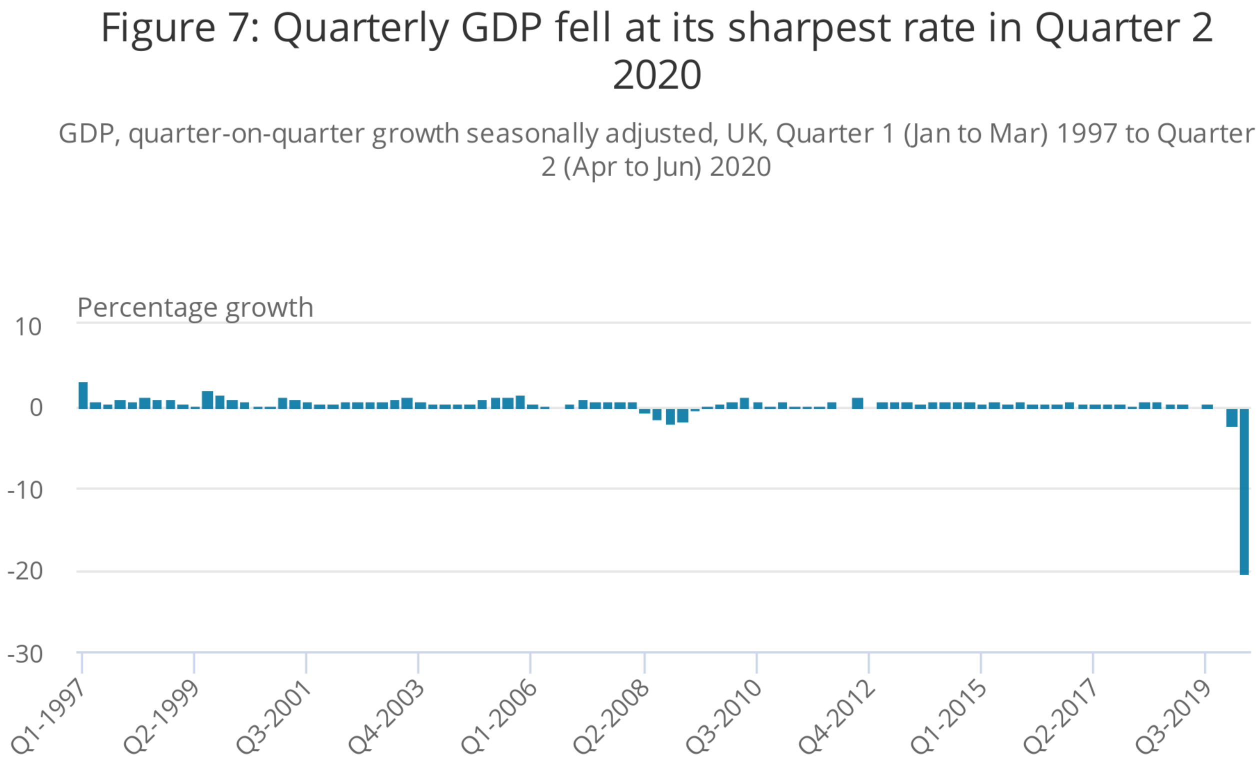
Date	mGDP	Significant factors during this period
2020-Q2	-20.4	COVID-19
1974-Q1	-2.7	Miners' strikes
1958-Q2	-2.4	During the 1958 economic downturn
2020-Q1	-2.2	COVID-19
2008-Q4	-2.0	During the 2008 to 2009 economic downturn

Source: Office for National Statistics – GDP(O)

Figure 7 shows the magnitude of the current fall compared with previous falls in quarterly GDP since Quarter 1 1997.

Figure 7: Quarterly GDP fell at its sharpest rate in Quarter 2 2020

GDP, quarter-on-quarter growth seasonally adjusted, UK, Quarter 1 (Jan to Mar) 1997 to Quarter 2 (Apr to Jun) 2020



Source: Office for National Statistics – GDP(O)

All three key indicators: services, manufacturing, and construction suffered the largest falls in June 2020 since their respective records began.

Table 2: The five largest falls in quarterly construction, manufacturing and services since records began
Quarterly construction, manufacturing and services, seasonally adjusted

Date		Significant factors during this period
	Construction	
Quarter 2 2020	-35.0	COVID-19
Quarter 1 2009	-7.1	During the 2008 to 2009 economic downturn
Quarter 4 2008	-5.9	During the 2008 to 2009 economic downturn
Quarter 1 2012	-4.3	Adverse weather
Quarter 2 2012	-2.9	Queen's Diamond Jubilee (extra Bank Holiday) and unseasonal weather
	Manufacturing	
Quarter 2 2020	-20.2	COVID-19
Quarter 1 2009	-5.1	During the 2008 to 2009 economic downturn
Quarter 1 1974	-5.0	Miners' strikes
Quarter 2 1975	-4.9	During the 1975 economic downturn
Quarter 3 1980	-4.5	Manufacturing recession
	Services	
Quarter 2 2020	-19.9	COVID-19
Quarter 1 2020	-2.3	COVID-19
Quarter 3 2008	-1.5	During the 2008 to 2009 economic downturn
Quarter 4 2008	-1.2	During the 2008 to 2009 economic downturn
Quarter 1 2009	-0.8	During the 2008 to 2009 economic downturn

Source: Office for National Statistics – GDP(O)

Notes

1. Quarterly GDP records began in 1955, services and construction records began in January 1997, and production and manufacturing records in January 1948. Back to table

Recent analysis explains our latest position on how we analyse GDP, including how we will continue to acknowledge "technical" recessions, comprising of at least two consecutive calendar quarters of contracting GDP. While it is still true that these early estimates are prone to revision, we prefer to focus on the magnitude of the contraction that has taken place in response to the coronavirus pandemic. It is clear, that the UK is in the largest recession on record. Our latest estimates show that the UK economy is now 17.2% smaller than it was in February 2020, the effects of which have been most pronounced in those industries that have been most exposed to public health restrictions and the effects of social distancing.

Furthermore, Quarter 2 2020 is now 22.1% below Quarter 4 (Oct to Dec) 2019, which is more than three times greater than the total fall during the next largest period of recession, which occurred during the global economic downturn of 2008 to 2009.

Table 3 shows all eight "technical" recessions experienced between Quarter 1 1955 and Quarter 2 2020, displaying the first and last periods, number of quarters of negative growth and the total decline from each recession.

Table 3: There have been eight "technical" recessions in quarterly GDP since records began in 1955
Quarterly GDP, seasonally adjusted, UK, Quarter 1 1955 to Quarter 2 2020

First quarter	Last quarter	Number of quarters of negative growth	Total growth
1956 Q2	1956 Q3	Two quarters	-0.3
1961 Q3	1961 Q4	Two quarters	-0.7
1973 Q3	1974 Q1	Three quarters	-4.1
1975 Q2	1975 Q3	Two quarters	-2.0
1980 Q1	1981 Q1	Five quarters	-4.2
1990 Q3	1991 Q3	Five quarters	-2.0
2008 Q2	2009 Q2	Five quarters	-6.0
2020 Q1	2020 Q2[1]	Two quarters	-22.1

Source: Office for National Statistics – GDP(O)

Notes

1. This represents the latest quarter. Back to table

4 . Services industries

Total services output during June 2020 continued to be significantly affected by the coronavirus (COVID-19) pandemic, at 17.6% below February 2020 level, the last full month of “normal” operating conditions.

Monthly output increased during June 2020 by 7.7%, the strongest monthly rise in output since records began in January 1997. Of the 50 services industries, 45 grew between May and June 2020. Of the total growth in services, 1.7 percentage points comes from wholesale and retail trade; repair of motor vehicles.

Supporting industries including the freight element of land transport; water transport, rail transport; postal and courier activities; and warehousing benefitted from the increase in retail trade. There was also an increase in information and communication; professional services; administrative and support services; and arts, entertainment and recreation sectors after these experienced falls in May 2020.

In contrast, real estate activities have fallen for the fourth month because of real estate activities; and rentals and commercial property, excluding imputed rent. Head offices and management consultants have also fallen for the fourth consecutive month.

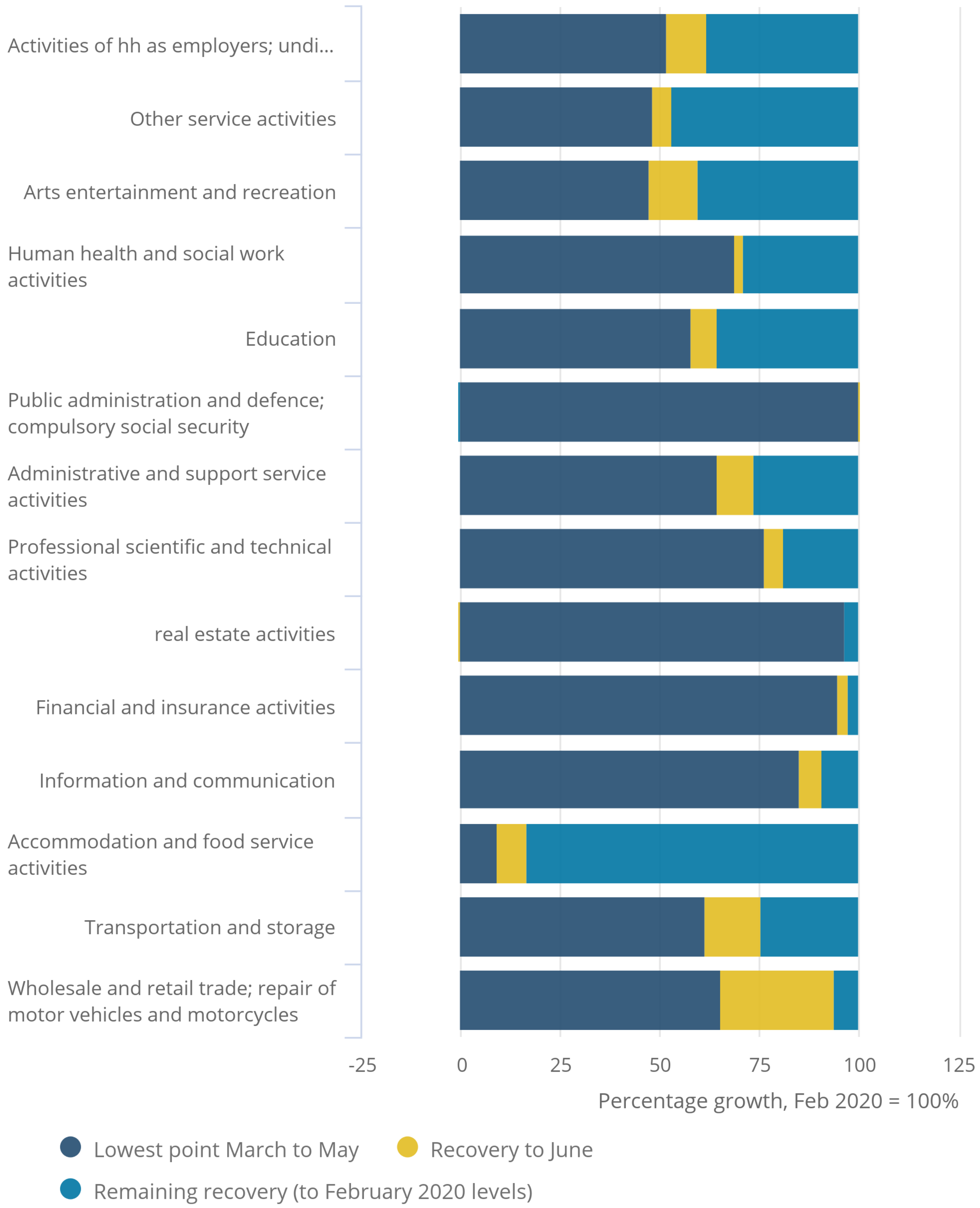
The rate of progress for each sector in returning to February 2020 levels can more easily be understood in Figure 8 where, for example, in June, wholesale and retail trade and repair of motor vehicles services was at 93.7% of the February 2020 level, rising from its lowest point between March and May of 65.2% of the February 2020 level. The left-hand part of Figure 8 represents the lowest point, the middle the recovery so far and the right-hand side the remaining recovery to reach February 2020 levels.

Figure 8: All but one of the services sectors remained below their February level despite widespread growth in June 2020

Index of Services, main sectors, seasonally adjusted, UK, February 2020 compared with June 2020

Figure 8: All but one of the services sectors remained below their February level despite widespread growth in June 2020

Index of Services, main sectors, seasonally adjusted, UK, February 2020 compared with June 2020



Source: Office for National Statistics – Index of Services

Wholesale and retail

Of the total growth in services, retail contributed 1.1 percentage points. Retail sales volumes increased by 13.9% when compared with May 2020, as non-food and fuel stores continued their recovery from the sharp falls experienced since the start of the coronavirus pandemic. The proportion of online spending reduced to 31.8% in June, when compared with the record 33.3% reported in May but is a considerable increase from the 20.0% reported in February. More information on retail is given in Retail sales, Great Britain: June 2020.

Wholesale, retail and repair of motor vehicles had the largest growth of 417.2% as car showrooms were open to the public in England from June 1 and elsewhere later in the month, replacing click and collect sales. However, the industry remained 23.1% below its February 2020 level (Figure 5 – see the motor trade and repair chart). Although June increased by approximately £11 billion, because of the May lockdown, it is approximately £4.2bn below the average value for June from 2015 to 2019.

Comments from business respondents to our Monthly Business Survey (MBS) reported that fleet car sales were subdued during June 2020.

Transport industries

Transportation experienced a much slower recovery in passenger activity compared with freight, and consequently, those transportation industries weighted heavily towards passenger transport remained weaker than those industries where freight is more dominant. This is supported by Transport use during the coronavirus (COVID-19) pandemic, which reported that the average usage in June 2020 was 73% for all motor vehicles, 6% for National Rail and 75% for heavy goods vehicles.

In June, rail transport was 75.1% below February 2020, land transport 19.7% below, water transport 32.0% below and air transport 95.7%. The most heavily hit of the transport industries was air transport, as a result of many flights remaining grounded in June.

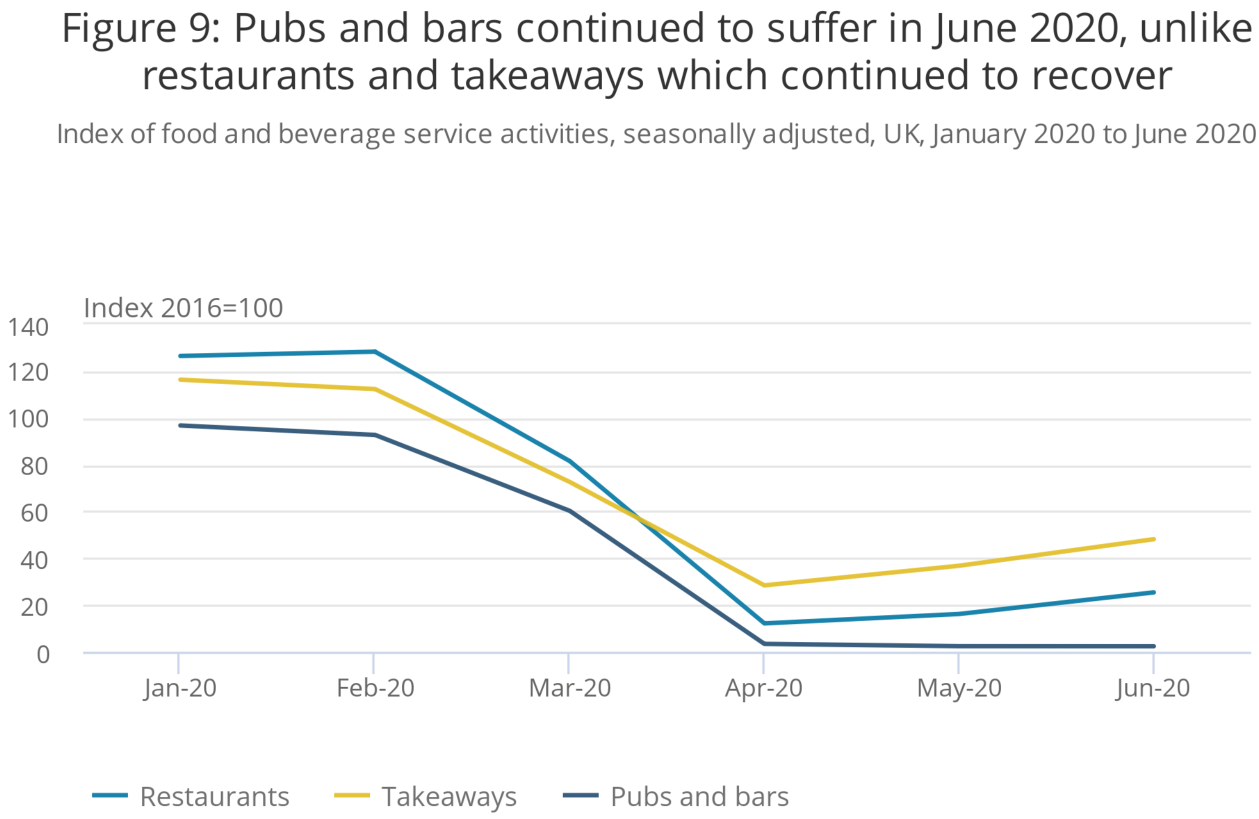
Accommodation and food service industries

Accommodation in June 2020 is 92.2% below February 2020, and food and beverage services is 83.4% below February 2020, despite both showing growth in June. Responder comments in our MBS stated that accommodation saw a small pickup because of bookings taken in June for the later part of the year.

Figure 9 shows the seasonally adjusted results of the monthly business survey for some of the components of food and beverage services. All components of food and beverage services fell in April, though there was less impact on takeaways. Since April, pubs and bars have remained at a very low level, however restaurants and takeaways have demonstrated growth, though remain well below their February 2020 levels.

Figure 9: Pubs and bars continued to suffer in June 2020, unlike restaurants and takeaways which continued to recover

Index of food and beverage service activities, seasonally adjusted, UK, January 2020 to June 2020



Source: Office for National Statistics – Index of Services

Information and communication

Film and television production grew 73.7% in June 2020 compared with May 2020, mostly because of a boost from film distribution businesses, with monthly growth magnified by the low levels of output in film and tv production. However, distribution output was below previous levels as the result of a lack of film releases affecting income. An increase in revenue from streaming services has only partially offset this.

In computer programming, the growth in the computer programming subindustry back to pre-pandemic levels was outweighed by weakness in the dominant consultancy subindustry.

Professional, scientific and technical activities

There was growth in June 2020 in professional, scientific and technical activities after a widespread decline in May 2020. The only industry in this sector to decline in June 2020 compared with May 2020 was management consultants, which fell for a fourth consecutive month. The decline was widespread but smaller businesses experienced larger falls.

Scientific research and development growth were caused by large businesses in the health sector, but this was not related to the current pandemic. This offsets continued weakness among smaller businesses.

Veterinary activities have nearly recovered from falls in April 2020, at only 7.8% less than February 2020.

Administrative and support activities

Administrative and support activities saw a 14.1% rise from May 2020 to June 2020, but was 26.6% below February 2020. This rise has been led by rental and leasing activities after significant growth in vehicle rentals and office administrative and support activities, which has seen strong growth from business support that more than offsets a weak position for office administration.

Education

Approximately 69% of the education sector is government output, which is measured using direct volume indicators rather than by deflating expenditure. The volume of educational activities is approximated, as detailed in Section 4 of Coronavirus and the effects on UK gross domestic product (GDP) . This element of education saw growth of 6.3% in June 2020 primarily because of an increase in classroom attendance. The MBS measures 21% of the education industry including universities; this element of education was flat.

Human health and social work activities

Approximately 85% of human health and social work is government output, which is measured using direct volume indicators rather than by deflating expenditure. The volume of government health care output in the UK is estimated using available information on the number of different kinds of activities and procedures, and weighted by the cost of each activity. It is detailed in Section 4 of Coronavirus and the effects on UK GDP . This element of health saw an estimated 1.3% growth in June 2020, although this is based on a very incomplete dataset at this stage. The MBS measures 10% of the health industry and includes non-government health care; this element of health care rose by approximately 1.5% because of widespread growth across the sector.

Arts, entertainment and recreation

Despite the notable monthly rise for the sports activities, and amusement and recreation activities industry of 58.9%, sector-level output for arts, entertainment and recreation is 40.2% weaker when compared with February 2020. Therefore, strength during June should only be viewed as a partial recovery, in part, because of the reopening of some professional sporting activities. Most notably, "Project Restart" saw professional football resume in England, firstly with the Premier League on 17 June 2020. Associated revenues related to this have been reported by several responders.

We also received responder-led evidence that since lockdown restrictions have been eased, many golf clubs have seen a pickup in revenue from a general increase in the numbers of golfers wanting to play.

In contrast, ongoing restrictions for the reopening of gyms, leisure centres, soft play centres and theme parks, continued to restrict revenue for businesses in those areas.

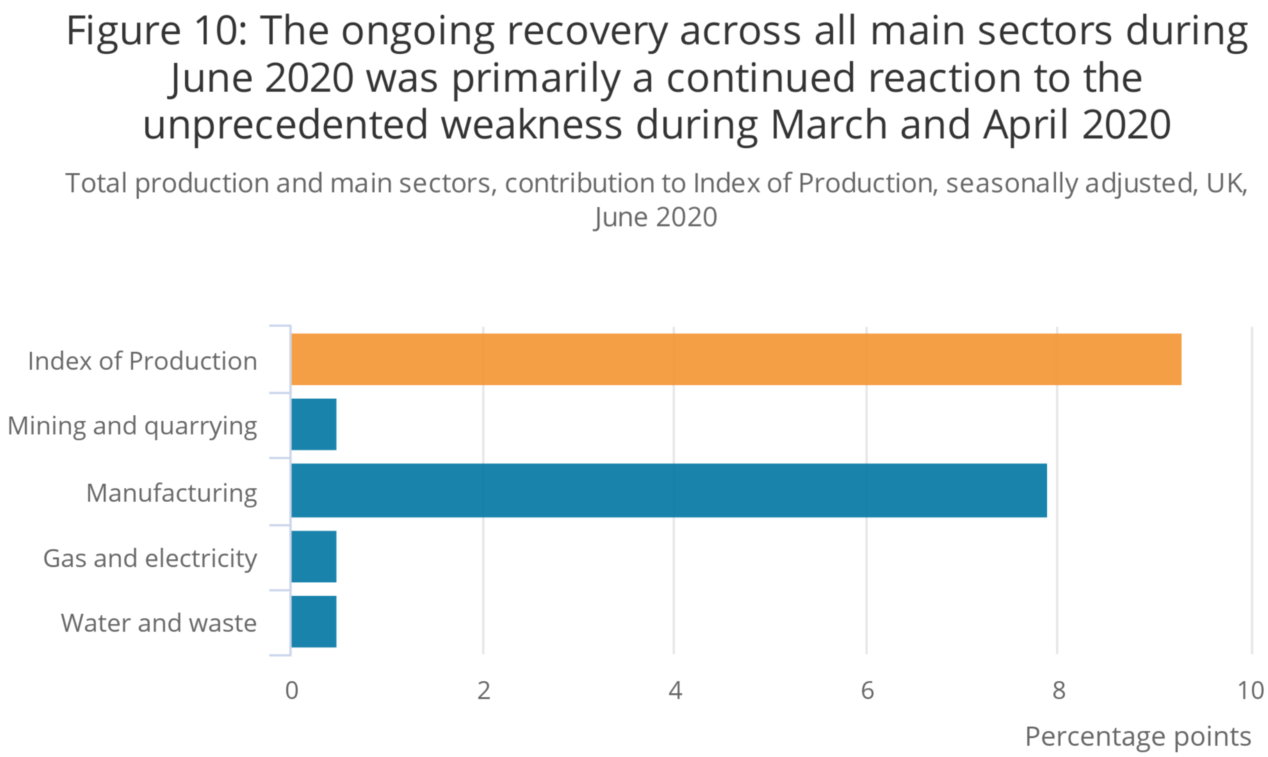
5 . Production industries

Total production output during June 2020 continued to be significantly affected by the coronavirus (COVID-19) pandemic, at 11.6% below the level of February 2020, the last full month of “normal” operating conditions. Additionally, it should be noted that production and manufacturing output declined for the fifth consecutive quarter, since Quarter 1 (Jan to Mar) 2019, highlighting that prior to the COVID-19 pandemic, output had been weak.

Production output increased during June 2020 by 9.3%, the strongest monthly rise since records began in January 1948. The strength was primarily because of the rise from the manufacturing sector, which contributed 7.9 percentage points (Figure 10), and accounts for 75% of the production industries. However, June's growth should be interpreted in the context of a continued reaction to the weakness displayed during March and April 2020 because of the significant impact of the coronavirus.

Figure 10: The ongoing recovery across all main sectors during June 2020 was primarily a continued reaction to the unprecedented weakness during March and April 2020

Total production and main sectors, contribution to Index of Production, seasonally adjusted, UK, June 2020



Source: Office for National Statistics – Index of Production

Notes:

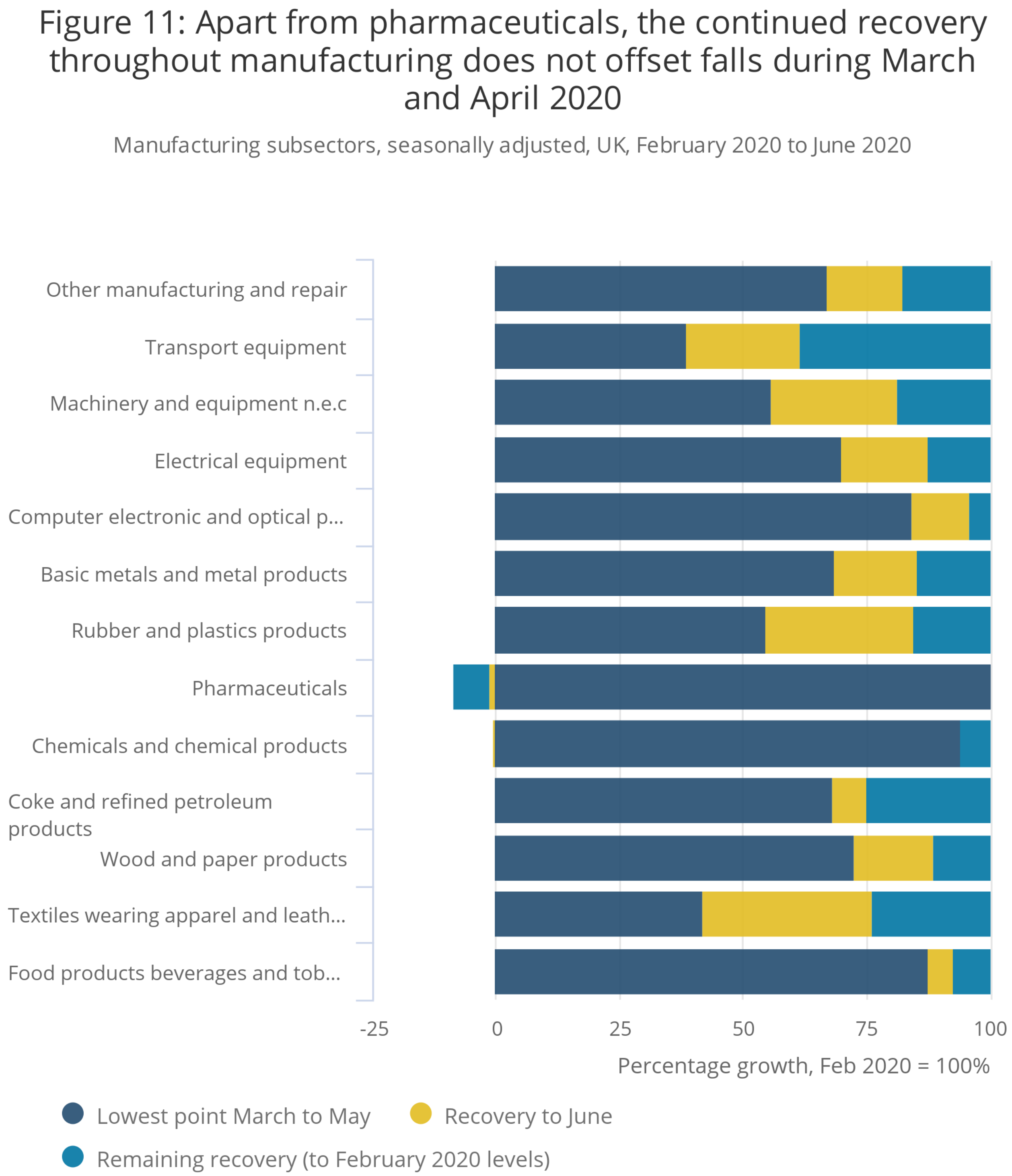
1. Parts may not sum to total because of rounding.

Monthly growth from manufacturing of 11.0% was the largest monthly rise since records began in January 1968, led by widespread strength, with 11 of the 13 subsectors displaying growth.

The rate of progress for each sector in returning to February 2020 levels can more easily be understood in Figure 11 where, for example, in June 2020 food products, beverages and tobacco was at 92.8% of the February 2020 level, rising from its lowest point between March and May of 87.5% of the February 2020 level. The left-hand part of Figure 11 represents the lowest point, the middle part represents the recovery so far and the right-hand side is the remaining recovery to reach February 2020 levels.

Figure 11: Apart from pharmaceuticals, the continued recovery throughout manufacturing does not offset falls during March and April 2020

Manufacturing subsectors, seasonally adjusted, UK, February 2020 to June 2020



Source: Office for National Statistics – Index of Production

During June 2020, there was a general increase in demand across some sectors, amid [part of a three-step strategy] aimed at lifting a range of restrictions on businesses across England from 1 June 2020. The devolved administrations for Northern Ireland, Scotland and Wales also announced the easing of lockdown restrictions (Figure 2).

We also received responder-led evidence that some of the strength during May and June 2020 was aligned to manufacturers having implemented changes to processes and/or machinery that allowed them to operate either partially or fully while adhering to social distancing and health and safety requirements.

In turn, these factors continued the partial recovery, which began during May 2020 but output for all but one of the sectors – pharmaceuticals – remained weaker compared with February 2020, following a dramatic fall in April 2020 (Figure 11).

The further easing of lockdown restrictions across the UK, but more importantly the demand for goods, will be the primary factors in determining how fast output for many of the manufacturing sectors return to levels seen before the coronavirus pandemic.

Following a fall in both export and domestic turnover growth over both March and April 2020, there was a partial recovery for both variables during May and June 2020, suggesting the further reopening of UK and worldwide supply chains amid the easing of lockdown restrictions.

However, the lockdown restrictions and social distancing measures that remained in the UK during June 2020 still had a negative impact across the manufacturing sector, more generally on:

- normal trading or factory operating conditions because of social distancing requirements
- supply chains (in the UK and overseas)
- consumer demand

To highlight this impact, Figure 4 displays the percentage of zero turnover responses in our Monthly Business Survey (MBS).

The percentage of zero turnover responses, although lower in June, was still higher than normal. This highlights the positive impact of those responders that were able to resume factory operations, even at reduced capacity. Businesses that remained closed will have to conform to health and safety government guidelines when they reopen.

Adaptations to processes and equipment may be required for some businesses to operate at full capacity or to recommence factory operations. Our Business Impact of Coronavirus (COVID-19) Survey (BICS) Wave 7: 1 to 14 June 2020 reported that over 90% of businesses across all manufacturing industries had responded they were implementing, or intending to implement, the top three most common safety measures (social distancing, hygiene measures and personal protective equipment (PPE)).

Given the continued widespread impact of the coronavirus pandemic across production and manufacturing, we have highlighted the most interesting anecdotal evidence, impacting both positively and negatively, on subsector- and industry-level growth.

Food products

Seven of the eight subindustries within this sector rose on the month, with notable rises in meat products (5.3%), bakery and farinaceous products (5.8%) and grain mill products and starches and starch products (10.4%).

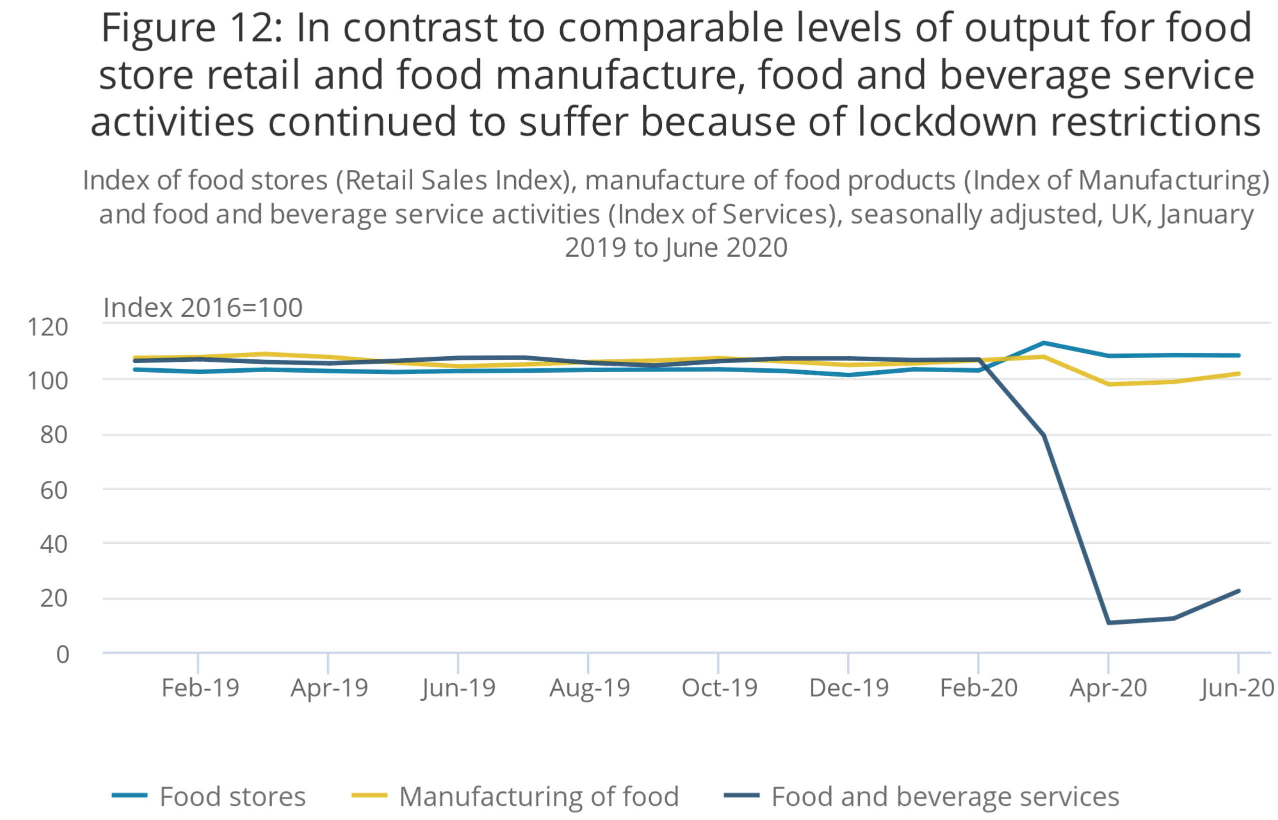
Despite the monthly strength of 3.0%, the food products industries were 4.5% weaker in June than in February 2020, with other food products, meat and meat products, and bakery and farinaceous products the hardest hit since the start of the pandemic.

As in April and May 2020, we continued to receive widespread evidence of severe disruption from the hospitality sector. Despite food stores remaining at a higher level since the peak in March 2020, Figure 12 highlights that the decline in output for food manufacture during April, was linked to a drastic fall in demand from pubs, restaurants and cafés.

The slight recovery during June for food and beverage services was led by higher demand from businesses who had reopened or were preparing to reopen, but the overall output level remained very weak.

Figure 12: In contrast to comparable levels of output for food store retail and food manufacture, food and beverage service activities continued to suffer because of lockdown restrictions

Index of food stores (Retail Sales Index), manufacture of food products (Index of Manufacturing) and food and beverage service activities (Index of Services), seasonally adjusted, UK, January 2019 to June 2020



Source: Office for National Statistics – Index of Production, Index of Services and Retail Sales Index

Elsewhere, we received a mix of positive and negative coronavirus impacts on the food products sector. Some responders that benefited from the panic-buying phase, prominent in supermarkets during March 2020 have seen turnover return to typical levels over the past few months. In contrast, we received some evidence of increased demand during June for meat products within supermarkets.

Alcoholic beverages and soft drinks

Despite monthly strength, output for alcoholic beverages and soft drinks were 17.3% weaker compared with February 2020, clearly affected by a drastic fall in demand from the hospitality sector because of the closures of pubs, restaurants and cafés.

The monthly rise of 6.0% from alcoholic beverages was largely driven by evidence of increased sales in supermarkets, with larger businesses facing this sector benefitting the most. This only partially offsets the clear impact from the continued fall in demand from the hospitality sector. We did receive some responder-led evidence that brewers are ramping up production in readiness for the reopening of pubs, bars and restaurants.

We also received responder-led evidence that some manufacturers of bottled spirits were adapting to coronavirus social distancing and health and safety requirements, including bottling processes. This led to increased production levels during June, although output remained below levels seen before the coronavirus pandemic, with low on trade demand affecting sales.

Soft drinks also continued to recover during June. The rise of 7.0% from this industry is because of widespread strength, with 89% of our MBS responders displaying increased turnover. In contrast, sales to pubs and restaurants continued to suffer mainly because of the sustained fall in demand from the hospitality sector.

Textiles, wearing apparel and leather products

This sector continued its recovery, rising by 25.1% during June 2020, led by increases across all three subindustries, although all fell during April to a notably weak level. As a result, output was still 23.7% weaker in June than in February 2020.

There was continued evidence of diversification, with some responders starting or continuing to produce personal protective equipment (PPE) such as masks and overalls (see below for further commentary regarding PPE).

Wood and wood products except furniture

Following notable strength during May, this industry also continued its recovery, rising by 29.9% during June, primarily because of an increase in supply to the construction trade.

There has also been continued evidence of increased demand for DIY products because of the amount of home DIY projects being undertaken as people spent more time making home improvements during lockdown. This is supported by our Retail Sales Index (RSI) release for June 2020, which evidenced that household goods stores saw an increase in volume sales in June at 3.6%, when compared with February 2020. According to retailers in this sector, consumers appeared to be carrying out home improvements while spending more time than usual in their homes.

Basic pharmaceutical products

This export-led sector continued to maintain strong levels of output, despite falling by 2.1% during June. There was a lack of responder-led evidence around COVID-19 treatment, vaccines and testing in June. A comparable export turnover proportion to February 2020 suggests that worldwide supply chains have been largely unaffected throughout the coronavirus pandemic for this industry.

Rubber and plastics products and other non-metallic mineral products

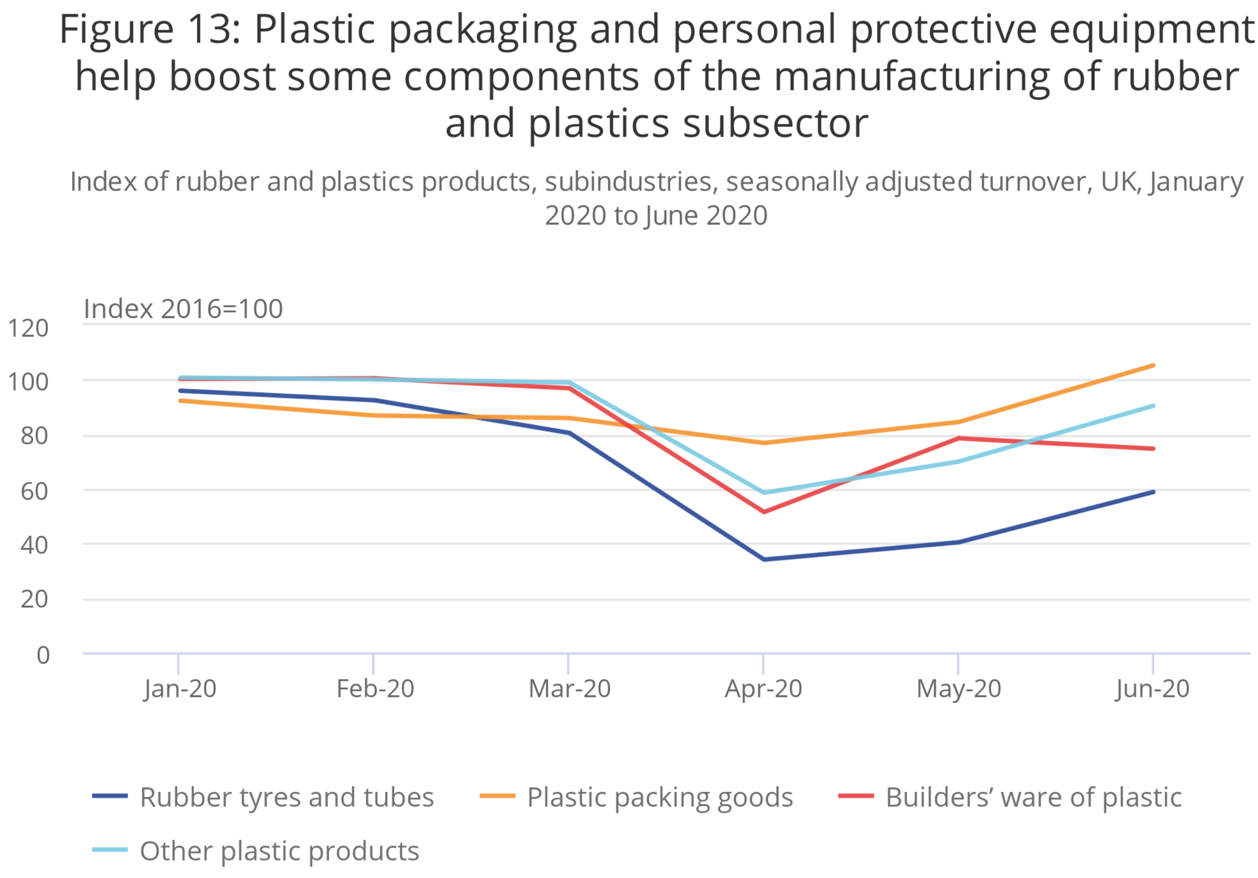
Sector-level growth of 16.8% continued the recovery that began last month and is because of strength across three of the four industries (Figure 13), although sector-level output is 15.5% weaker than February 2020.

Figure 13 shows the seasonally adjusted results of the monthly business survey for some of the components of the manufacturing of rubber and plastics. All components of rubber and plastics fell in April, though there was less impact on plastic packaging, and this has grown strongly in recent months, partly because of increased retail and internet sales.

Other plastic products has also shown strong growth since April; this component includes manufacture of personal protective equipment. Rubber tyres had the largest decline in April and has improved the least because of lack of demand from motor vehicle manufacturers. The builders' ware of plastic has been boosted by demand from construction and DIY but remains below February 2020 levels.

Figure 13: Plastic packaging and personal protective equipment help boost some components of the manufacturing of rubber and plastics subsector

Index of rubber and plastics products, subindustries, seasonally adjusted turnover, UK, January 2020 to June 2020



Source: Office for National Statistics – Index of Production

Motor vehicles, trailers and semi-trailers

This industry displayed a record monthly rise of 288.5%, although this should be treated within the context of a fall of 45.1% compared with February 2020 (Figure 5 – see the manufacture of cars chart). We received responder-led evidence that most of the largest manufacturers have reopened, although they have operated at a reduced level following plant closures because of the coronavirus.

This is supported by our BICS: Wave 7 results, where 48% of businesses within this industry "expected turnover to increase a little" amid a continued lack of customer sales and supply chain issues.

Because of ongoing weak global demand, car production remained significantly below normal levels. The Society of Motor Manufacturers and Traders (SMMT) reported that in comparison with June 2019, [car production for June 2020 was down by 48.2%].

Air, spacecraft and related machinery

Output is 32.7% weaker in comparison with February 2020 and the decline of 5.8% during June is the fourth consecutive monthly fall. As a result of the widely reported negative impact on global civil aviation, manufacturers facing this sector have naturally been hardest hit, amid growing evidence of a lack of demand.

In turn, this lack of demand has affected the repair and maintenance of aircraft and spacecraft industry, where output is 20.9% weaker than February 2020.

Other manufacturing

This subindustry rose by 16.0% during June and is only 2.1% below February 2020. Responder-led evidence suggested a continued positive effect in June from increased demand for medical equipment (for example, PPE, ventilators and oxygen tubing). In contrast, we continued to receive responder-led evidence of reduced demand for other medical equipment, linked to the suspension of non-essential medical appointments and surgery (for example, dentists and opticians).

We also received continued evidence of a positive impact from increased demand for toys and games, linked to keeping children occupied at home during the period of school closures.

Mining and quarrying

Monthly sector level growth of 8.4% was because of increased output from oil and gas extraction (6.6%) and other mining and quarrying (14.7%). This resulted in almost a full recovery to levels seen before the coronavirus pandemic but was still 2.6% below February 2020.

Electricity and gas

The rise of 4.1% at sector level was driven by electricity supply. This rose by 4.4%, mainly because of increased demand from industry as more factories and premises reopened during June.

Water and waste

The sector level rise of 4.1% was led by waste collection, which rose by 15.8%, because of a general increase in activity. This is supported by our BICS Wave 7 results, where 100% of businesses were "currently trading, and had been for two weeks or more". However, this resumption in overall activity should be contrasted with comments relating to lower demand for their services while customers reopen.

6 . Personal Protective Equipment

Demand for personal protective equipment (PPE) has grown significantly since the start of the coronavirus (COVID-19) pandemic. We have collected a range of comments from businesses as a by-product of our survey. The comments and data supplied by businesses indicate a positive impact from PPE but we are unable to quantify this and we should caution that the intelligence is indicative rather than comprehensive. For example, it would be common for a business to comment that it has begun to manufacture PPE but the comment would not be repeated each month.

Businesses in the manufacturing sector accounted for 40% of the comments received from 78 different businesses over the period March 2020 to June 2020. The manufacture of PPE equipment is concentrated within textiles, clothing, rubber and plastics, and the medical equipment component of other manufacturing; these accounted for nearly half of the comments regarding PPE within manufacturing.

Further manufacturers comments described businesses wholesaling PPE equipment, while there was also clear evidence of diversification from businesses in areas such as engineering and printing.

Half of the comments were from businesses classified to the wholesaling industry. A further 10% were from other services industries describing activities that were wholesaling. The largest increase in turnover has been evident from businesses involved in wholesaling activities including the import of PPE.

7 . Construction

Construction output remains 24.8% below February 2020 despite growing by a record 23.5% in June 2020 compared with May 2020; this is substantially higher than the previous record monthly growth of 7.6% in May 2020.

In June 2020, there was monthly growth across all sectors with only infrastructure, public other new work, and private industrial growth not being record monthly growths. Most of the growths in construction sectors were record growth rates since monthly records began in 2010.

For more information please see Construction output in Great Britain: June 2020 and new orders April to June 2020.

8 . Data collection and sources

The Monthly Business Survey (MBS) is the primary data source for 75% of production industries and 50% of services industries. This is an online questionnaire where businesses are asked to provide their turnover and, if they are within manufacturing, export turnover.

Survey response – production and services industries

Since the move to monthly GDP in 2018, the third month of each quarter has a shorter period for MBS collection to allow time for the calculation of a balanced set of UK National Accounts for the quarter.

Response by turnover for services industries in June 2020 is 75.2%, slightly down on 77.7% achieved in June 2019 and 76.6% in June 2018 (see Historical MBS (services) response rates).

Similarly for production industries, response by turnover was 75.2% in June 2020, slightly down on 78.1% achieved in June 2019 and 80.1% in June 2018 (see MBS (production) response rates).

Survey response – construction industry

The response rate for June 2020 is 66.0%. For June 2020, because of the gross domestic product (GDP) timetable we have to collect the data over a shorter time period in the final month within a quarter. Even with having this shorter period to collect data of around one week, we still were able to improve upon the April 2020 response rates (see Table 11 in the construction output June 2020 release). This is partially because data for the Monthly Business Survey for construction and allied trades (MBS) is being collected via an online questionnaire since April 2020.

Other data sources

Other data are primarily sourced from the Office for National Statistics (ONS) (for example, government expenditure, household expenditure and finance expenditure) but also other bodies such as the Department for Transport (DfT), Civil Aviation Authority (CAA) and Department for Business, Energy and Industrial Strategy (BEIS). These account for 50% of services industries and 25% of production industries. We are also able to gain intelligence from these data providers regarding monthly changes in their data.

We also use the fortnightly Business Impact of Coronavirus (COVID-19) Survey (BICS) as part of our quality assurance and validation process.

Volatility

Care should be taken when using the month-on-month movements, as data can be volatile; longer-term growth rates and examination of the time series allow for better interpretation of the statistics. Shorter time series, including those for the construction industry, which only began in 2010, are implicitly more volatile.

Forecasting

There is always a trade-off between the timeliness of our published estimates and the availability of data. Where this is unavailable, the data have been forecasted using standard ONS methodology and practice for recent periods.

These inevitably include quarterly data underpinning the ONS expenditure approach to the measure of GDP (government expenditure from HM Treasury, household expenditure from the ONS Living Costs and Food Survey (LFS), and finance expenditure primarily from the Bank of England) where we are using initial informed estimates from ONS suppliers, including direct volume estimates where appropriate.

At this stage, these data are predominantly based on forecasts, so we have used a wider range of data to inform our judgements around these, for example:

- we have used the Cabinet Office Briefing Rooms (COBR) report (443 KB) to help model ferry data in the water transport industry and both passenger and freight data in the rail transport industry while we await our normal delivery of quarterly data from the DfT

- the independent schools component of the education industry is measured using annual data from the Independent Schools Council, which requires the use of forecast data for Quarter 2 (Apr to June) 2020; we have previously modelled the forecast such that it mirrors the movement in government-funded schools; however, we have updated our model to include data on private schools from teacher tapp, an application-based analysis of the hours worked by teachers, which suggests additional hours have consistently been worked in these settings

- workforce jobs data for Quarter 2 2020 are not yet available; for mining support services, we have modelled data from oil and gas extraction, while for membership organisations, we have modelled data from the experimental series of weekly hours worked for the whole economy

Changes in products produced by businesses

Comments received as part of the MBS have made it clear that businesses have begun to change their product and service mix because of the coronavirus (COVID-19) pandemic. Within the manufacturing industries, this has particularly focused on, for example, medical equipment, personal protective equipment (PPE) and hand sanitisers by businesses previously unfamiliar with the manufacture of those products.

Businesses can often change the make-up of their products and services and as a consequence, it is challenging to keep pace with these changes in the short term. We capture these changes through the Annual Survey of Goods and Services (ASGS), which provides product breakdowns of each industry.

Revisions

Revisions are an inevitable consequence of publishing on a timely basis as more data become available, including higher response rates to surveys. Users should be aware that during periods of significant data volatility, it is possible that revisions may be greater than normal. These can be tracked through revisions triangles published alongside the appropriate bulletins and articles, and will be featured in these releases where appropriate.

9 . Related links

[GDP monthly estimate, UK: June 2020]
Bulletin | Released 12 August 2020
Gross domestic product (GDP) measures the value of goods and services produced in the UK. It estimates the size of and growth in the economy and includes the Index of Production (IoP), Index of Services (IoS) and construction output in Great Britain.

[Coronavirus and the latest indicators for the UK economy and society: 6 August 2020]
Article | Released 6 August 2020
Early experimental data on the impact of the coronavirus (COVID-19) on the UK economy and society. These faster indicators are created using rapid response surveys, novel data sources and experimental methods.

[Coronavirus (COVID-19) roundup]
Article | Updated as and when data become available
Catch up on the latest data and analysis related to the coronavirus pandemic and its impact on our economy and society.

[Coronavirus (COVID-19) latest data and analysis]
Web page | Updated as and when data become available
Latest data and analysis on the coronavirus in the UK and its effect on the economy and society.

[Coronavirus and the effects on UK GDP]
Article | Released 6 May 2020
How the global coronavirus pandemic and the wider containment efforts are expected to impact on UK GDP as well as some of the challenges that National Statistical Institutes (NSIs) are likely to face.

[Meeting the challenge of measuring the economy through the coronavirus pandemic]
Blog | Released 6 May 2020
A blog looking at new challenges we face in terms of data collection during the coronavirus pandemic.