



Short-Term Output Indicators for Wales: April to June 2020

22 October 2020
SFR 179/2020

These estimates are the first output indicators covering a full period of the pandemic and show significant decreases for both Wales and the UK. However, care should be taken when interpreting these indices – estimates for individual quarters can fluctuate and it is recommended that emphasis is based on longer term trends. Estimates for Wales are typically more volatile than for the UK and therefore comparisons between Wales and the UK should be treated with caution. The coronavirus pandemic has had an impact on the response rate, and a number of response rate targets have not been met. Further details can be found in the [key quality information](#).

This data is one part of the picture of how coronavirus is impacting the Welsh economy. Other data sources such as the latest [labour market indicators](#), the [Business Impact of Coronavirus Survey](#) and estimates of [Welsh goods exports](#) also give an indication of the scale of the impact.

1. Background and Key Points

Index of market services

- Comparing year ending June 2019 to year ending June 2020, the index of market services decreased by 6.0% in Wales and by 4.7% in the UK.
- Comparing to the previous quarter, the index decreased by 14.8% in Wales and by 19.4% in the UK.

Index of production

- Comparing to the previous year, the index of production decreased by 4.2% in Wales and by 6.6% in the UK
- Comparing to the previous quarter, the index decreased by 13.7% in Wales and by 16.9% in the UK.

Index of construction

- Comparing to the previous year, the index of construction decreased by 8.8% in Wales and by 9.3% in the UK.
- Comparing to the previous quarter, the index decreased by 31.2% in Wales and by 35.0% in the UK.

All three indices had the largest quarterly falls since the series began in 1988.

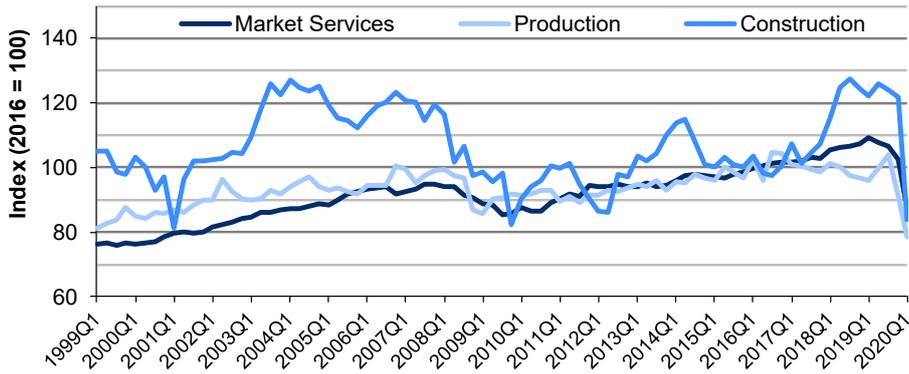
About this release

The indices of market services, production and construction for Wales are quarterly indices showing short term movements in the output of companies in the market services, production and construction sectors within Wales. This release includes data up to June 2020.

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Chart 1.1: Summary of Short Term Output Indicators



Source: Short-term output indicators, WG and ONS

Impact of coronavirus on short term output indicators

The latest estimate for [UK gross domestic product](#) (GDP) published by the Office for National Statistics (ONS) estimated the largest fall for April to June 2020 since quarterly estimates began in 1995. The [ONS release](#) also describes how the contraction in the UK economy reflects the ongoing containment policies that have been put in place, including public health restrictions and forms of voluntary social distancing.

Quarterly GDP figures for Wales are published roughly 7 months after the end of the reference quarter. The next release is due on 29th October 2020 and estimates will cover January to March 2020.

Summary of Indices

The index of production, the index of construction and the index of market services are three separate indices. The index of production covers sections B to E of the Standard Industrial Classification (SIC) 2007, the index of construction covers section F and the index of market services covers sections G to N and R to T:

Section B: Mining and Quarrying	Index of Production
Section C: Manufacturing	
Section D: Electricity, Gas, Steam and Air Conditioning Supply	
Section E: Water Supply; Sewerage, Waste Management and Remediation Activities	
Section F: Construction	Index of Construction
Section G: Distribution	Index of Market Services
Section H: Transport	
Section I: Accommodation and Food Service Activities	
Section J: Information and Communication Activities	
Section K: Financial and Insurance Activities	
Section L: Real Estate Activities	
Section M: Professional, Scientific and Technical Activities	
Section N: Administrative and Support Service Activities	
Sections R, S & T: Other Services	

The index of production is composed of three sub-indices, the largest of which is Manufacturing which accounts for 81.9%. Electricity, Gas and Water Supply accounts for 17.0% and Mining and Quarrying for 1.1%.

The largest components within Manufacturing are Transport Equipment and Other Manufacturing and Repair, accounting for 18.0% and 17.4% of Manufacturing, respectively. The smallest component within Manufacturing is Textiles, Wearing Apparel & Leather accounting for 1.5% of Manufacturing.

The largest industries within the Index of Market Services for Wales are Real Estate Activities and Distribution accounting for 26.6% and 21.0% respectively. The smallest industries are Information & Communication Activities (accounting for 6.1%) and Transport (accounting for 6.5%). For further information on these industry sections and sub-sectors see [Appendix A](#).

Table 1.1 shows the index of production, index of construction and the index of market services for Wales. Percentage changes are provided to show the change over the latest year and the latest quarter for Wales and the UK.

Table 1.1: Seasonally Adjusted Indices of Output for Wales ⁽¹⁾*(2016 = 100)*

						Latest percentage change			
	2019			2020		4 qtrs to previous 4 qtrs		qtr to previous qtr	
	Q2	Q3	Q4	Q1	Q2	Wales	UK ⁽²⁾	Wales	UK ⁽²⁾
PRODUCTION	95.8 (r)	99.8 (r)	104.1 (r)	91.1 (r)	78.7	-4.2	-6.6	-13.7	-16.9
Manufacturing	99.0 (r)	104.5 (r)	109.1 (r)	94.4 (r)	80.0	-4.7	-8.0	-15.2	-20.2
Mining and Quarrying	74.1 (r)	70.9	66.3 (r)	69.8 (r)	53.7	2.7	-3.8	-23.1	-7.3
Electricity, Gas and Water Supply ⁽³⁾	82.0 (r)	79.4 (r)	82.4 (r)	76.9 (r)	73.7	-1.5	-2.2	-4.2	-7.2
CONSTRUCTION	122.2 (r)	125.9 (r)	123.9 (r)	121.7 (r)	83.7	-8.8	-9.3	-31.2	-35.0
MARKET SERVICES	109.2 (r)	107.9 (r)	106.5 (r)	102.2 (r)	87.1	-6.0	-4.7	-14.8	-19.4
Distribution	114.8 (r)	111.6 (r)	112.0 (r)	107.3 (r)	85.0	-6.6	-5.5	-20.8	-20.0
Transport	138.4 (r)	129.0 (r)	123.5 (r)	113.4 (r)	93.6	-7.4	-9.0	-17.5	-30.0
Accommodation & Food Service Activities	107.2 (r)	107.0 (r)	94.3 (r)	83.8 (r)	27.5	-22.5	-24.3	-67.2	-86.7
Information & Communication Activities	105.5 (r)	103.1 (r)	107.3 (r)	102.4 (r)	94.0	-9.4	-1.5	-8.2	-11.8
Financial & Insurance Activities	102.0	104.7 (r)	105.8 (r)	100.8 (r)	96.7	-3.1	-1.8	-4.1	-3.7
Real Estate Activities	104.0 (r)	103.1 (r)	101.7	101.7 (r)	101.1	-2.3	0.0	-0.5	-3.2
Activities	122.9 (r)	123.1 (r)	127.8 (r)	123.9 (r)	114.0	4.5	-2.9	-8.0	-20.4
Administrative & Support Service Activities	106.6 (r)	111.6	112.2	100.3 (r)	83.5	-5.9	-7.0	-16.7	-30.2
Other Services	89.6 (r)	85.5 (r)	78.9 (r)	79.9 (r)	56.0	-15.4	-11.7	-29.9	-45.4

Source: Short-term output indicators, WG and ONS

(1) All series are seasonally adjusted. Please see Table B (Appendix B) for more detail on industrial sectors.

(2) Revisions to the series are normally made each quarter to take account both of more recent information and improved seasonal factors.

(3) UK figures for Production and Market Services as published by the Office for National Statistics on 30 September 2020 and UK figures for Construction as published by the Office for National Statistics on 11 September 2020.

(r) Data revised since last publication

Other sources of economic output statistics

Until recently these short term output indicators (STOI) have been the best and most timely output measures available for the Welsh economy. The Office for National Statistics (ONS) have now developed experimental statistics that are conceptually similar to STOI called [GDP for Wales and the English regions](#).

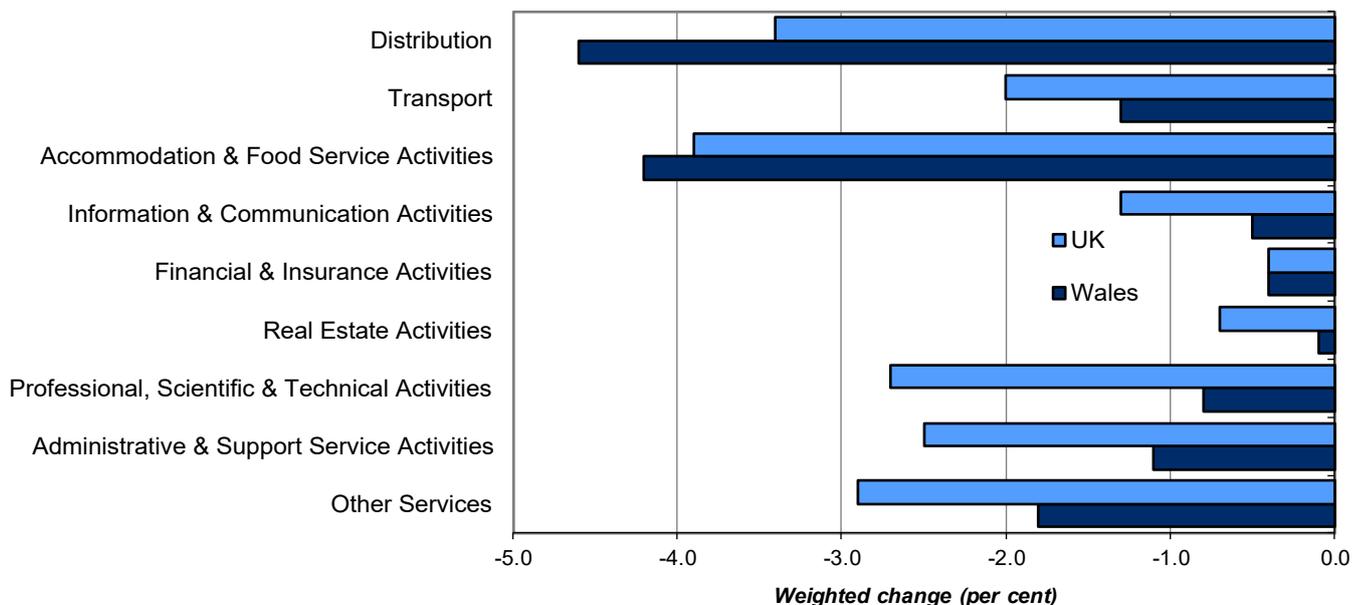
We published a [statistical headline](#) which draws out the key points for Wales, and a [Chief Statistician's update](#) which describes the new statistics in some more detail. More information and comparisons between GDP and STOI can be found in the [key quality information](#) section of this release.

2 Index of Market Services: latest changes

This section examines the outputs of each industry within the index of market services and their respective impact on the overall index. The index of market services accounts for approximately 46.9% of the Welsh economy.

Chart 2.1 shows a comparison of the current quarter with the previous quarter, for both Wales and the UK.

Chart 2.1: Contribution to quarterly percentage change, current quarter compared with previous quarter



Source: Short-term Output Indicators, WG and ONS

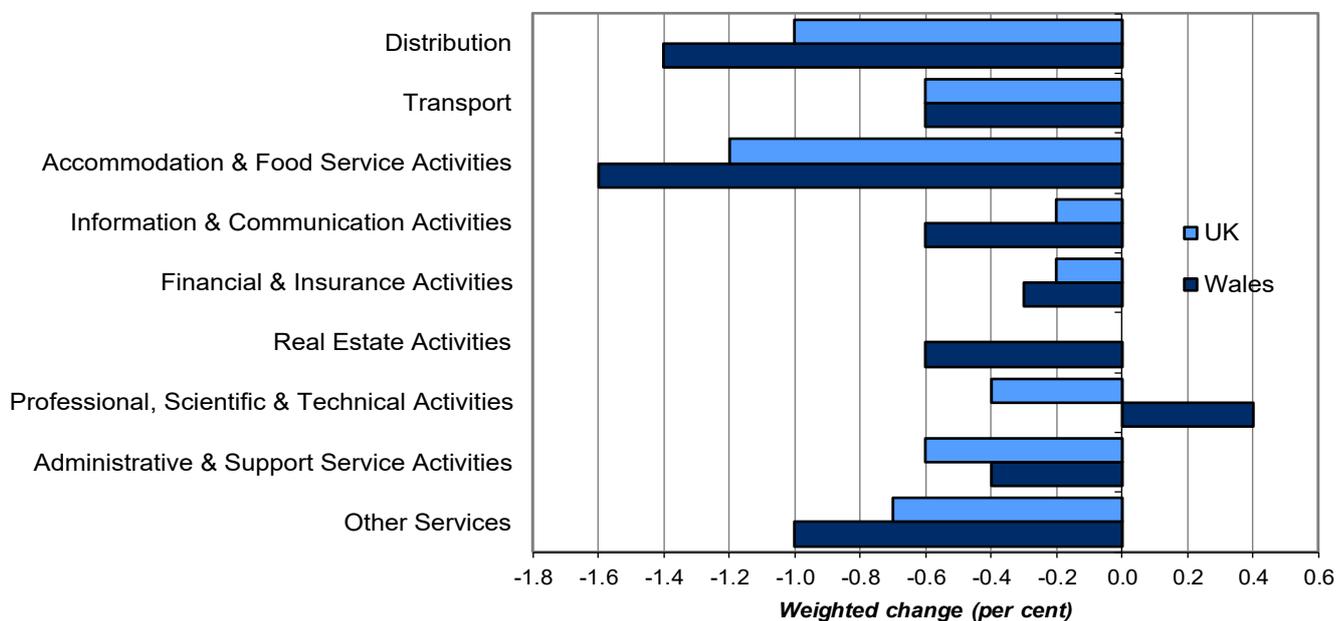
All nine industries have contributed to the fall in the index of market services, for both Wales and the UK. Distribution and Accommodation & Food Service Activities have both shown the largest reductions with them contributing more to Wales than the UK. All other sub-indices have fallen more in the UK than in Wales, apart from Financial & Insurance Activities.

In Wales, Real Estate Activities decreased the least, followed by Financial & Insurance Activities. While in the UK, Financial & Insurance Activities decreased the least, followed by Real Estate Activities.

Smaller sample sizes in Wales can result in a less stable series. This is particularly the case in the short term but longer term trends are regarded as more reliable.

Chart 2.2 shows the impact of changes in the sub-sectors on the index as a whole for the latest year (based on weighted data).

Chart 2.2: Contribution to overall percentage change, latest four quarters compared with previous four quarters



Source: Short-term Output Indicators, WG and

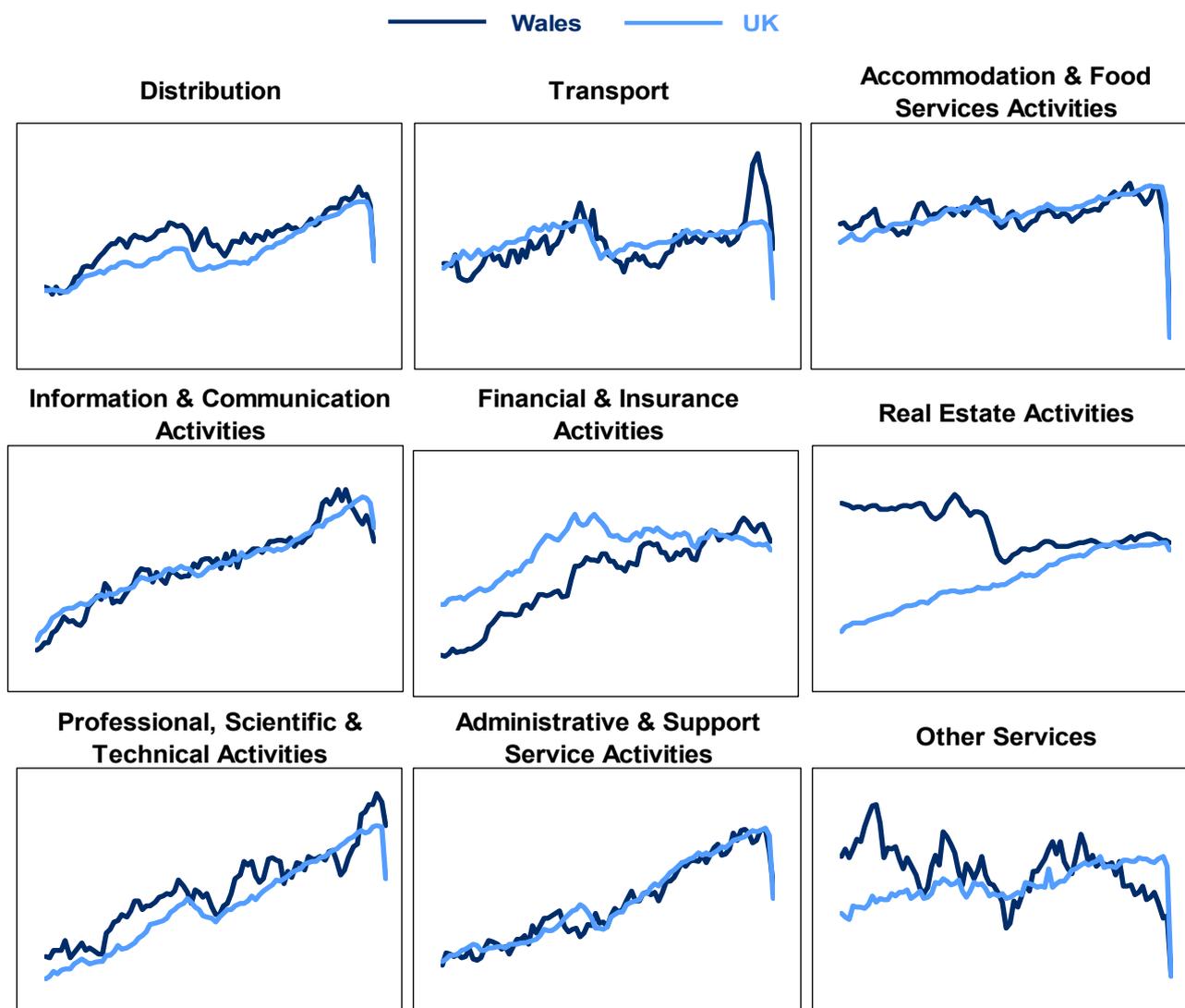
The large falls seen in the chart 2.1 have had a much bigger impact than usual when comparing between the four quarters. As in chart 2.1, Distribution and Accommodation & Food Service Activities can be seen to have the largest falls across the sub-indices, in both Wales and the UK.

Despite Professional, Scientific & Technical Activities decreasing over the quarter it is the only sub-sector within Wales to have increased over the year. All UK sub-sectors fell apart from Real Estate Activities which remained unchanged.

3 Index of Market Services: industry trends

This section shows changes in output since 1999 for the nine industries which comprise the index of market services. The Welsh results for some are more volatile than for the UK equivalents because of smaller survey samples. Table B2 in [Appendix B](#) provides the latest annual and quarterly data for the industries and their sub-sectors. Time series for the index of market services industry sectors and sub-sectors are available on [StatsWales](#).

Chart 3.1: Market services Sub-indices – 1999 Q2 to 2020 Q2, (2016=100)



Source: Short-term output indicators, WG and ONS

Distribution

The Index of Distribution fell during the 2008-09 recession in Wales and the UK, but both saw an overall increase until the coronavirus pandemic where it fell significantly. Comparing the second quarter of 2020 to the previous quarter, the Index of Distribution decreased by 20.8% in Wales and by 20.0% in the UK. The Welsh series is now at its lowest point since 2002, the UK series is the lowest since 2012.

Transport

There was a significant fall in activity in Wales and across the UK during the recession, with the recovery only recently reaching pre-recession peaks. There was a sharp increase in 2019 Q1 and

Q2, however most of this largely reflects re-classification of business activity and a change in the sample, rather than an actual increase in activity. In Wales, the Index of Transport decreased by 17.5% in the last quarter, comparing to a fall of 30.0% for the UK as a whole. The Index of transport has not been lower since 2013, whilst the UK has not been lower since the series began.

Accommodation and Food Service Activities

Though trends in Wales are more volatile than for the UK as a whole, the Index of Accommodation and Food Service Activities in Wales has tracked the UK trend over the long term. In the latest quarter, activity in Wales decreased significantly by 67.2% and the UK index decreased by 86.7%. The latest quarter is by far the lowest the series has been since records began in both Wales and the UK. In Wales, some sample changes in SIC 56.1 (Restaurants) has prevented a drop as severe as that seen in the UK.

Information and Communication Activities

In the latest quarter, the Index of Information and Communication Activities fell by 8.2% in Wales and by 11.8% in the UK. The index is now at its lowest point since 2015 in Wales and 2016 in the UK. This drop isn't as severe as other industries due to the steady growth in both Wales and the UK since the series began.

Financial and Insurance Activities

In the latest quarter, the index has fallen by 4.1% in Wales and by 3.7% in the UK. The latest quarter is the lowest the index has been since 2016 in Wales and 2005 in the UK. Since 1999, the Index of Finance and Insurance Activities for Wales has increased with a broadly stable upward trend. For the UK the sector increased up to 2008 and, after a decrease to 2010, has changed relatively little since.

Real Estate Activities

Real Estate Activities is one of the sub-sectors least effected by the pandemic. Over the quarter, activity has fallen by 0.5% in Wales and fallen by 3.2% in the UK. Historical trends in Real Estate Activities have been very different for Wales and the UK. In Wales, the index was broadly flat from 1999 to 2007, before falling substantially during the recession. After a period of recovery the index has been remained broadly the same since 2015. By contrast, at a UK level Real Estate Activities have increased at a stable rate over the whole period.

Professional, Scientific and Technical Activities

In the latest quarter, the index has fallen by 16.7% in Wales and by 30.2% in the UK. Despite the large fall over the latest quarter, the index increased by 4.5% in Wales and decreased by 2.9% in the UK, over the year. This is due to the large increase in Wales at the end of 2018 which can be traced back to sample changes in two of the Index's sub-sectors. This quarter's Welsh index is the lowest it has been since the large increase took place in 2018. The UK index hasn't been this low since 2013.

Administrative and Support Service Activities

Administrative and Support Service Activities have increased almost in parallel in Wales and the UK until the pandemic. Activity in Wales has fallen by 16.7% in the latest quarter, compared to a decrease of 30.2% for the UK. The latest quarter is the lowest the series has been since 2013 in Wales and since 2011 in the UK.

Other Services

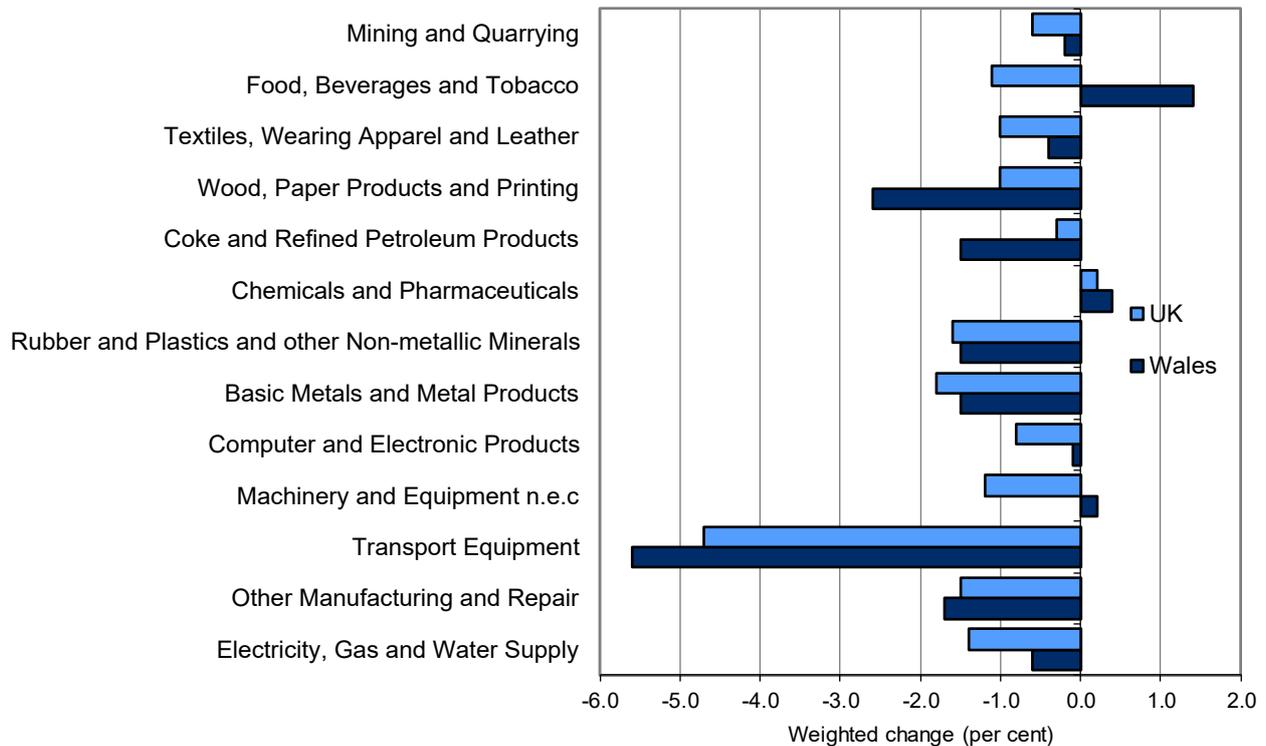
Since 1999, the Index of Other Services for Wales has been volatile, with a decreasing trend overall. The UK trend, by contrast, has been of a relatively stable increase. This changed in the latest quarter with both Wales and the UK falling to the lowest the series began. In the latest quarter, the index has fallen by 29.9% in Wales and by 45.4% in the UK.

4. Index of Production: latest changes

This section examines the outputs of each industry within the index of production and their respective impact on the overall index. The index of production accounts for approximately 21.0% of the Welsh economy.

Chart 4.1 shows a comparison of the current quarter with the previous quarter.

Chart 4.1: Contribution to quarterly percentage change, current quarter compared with previous quarter



Source: Short-term Output Indicators, WG and ONS

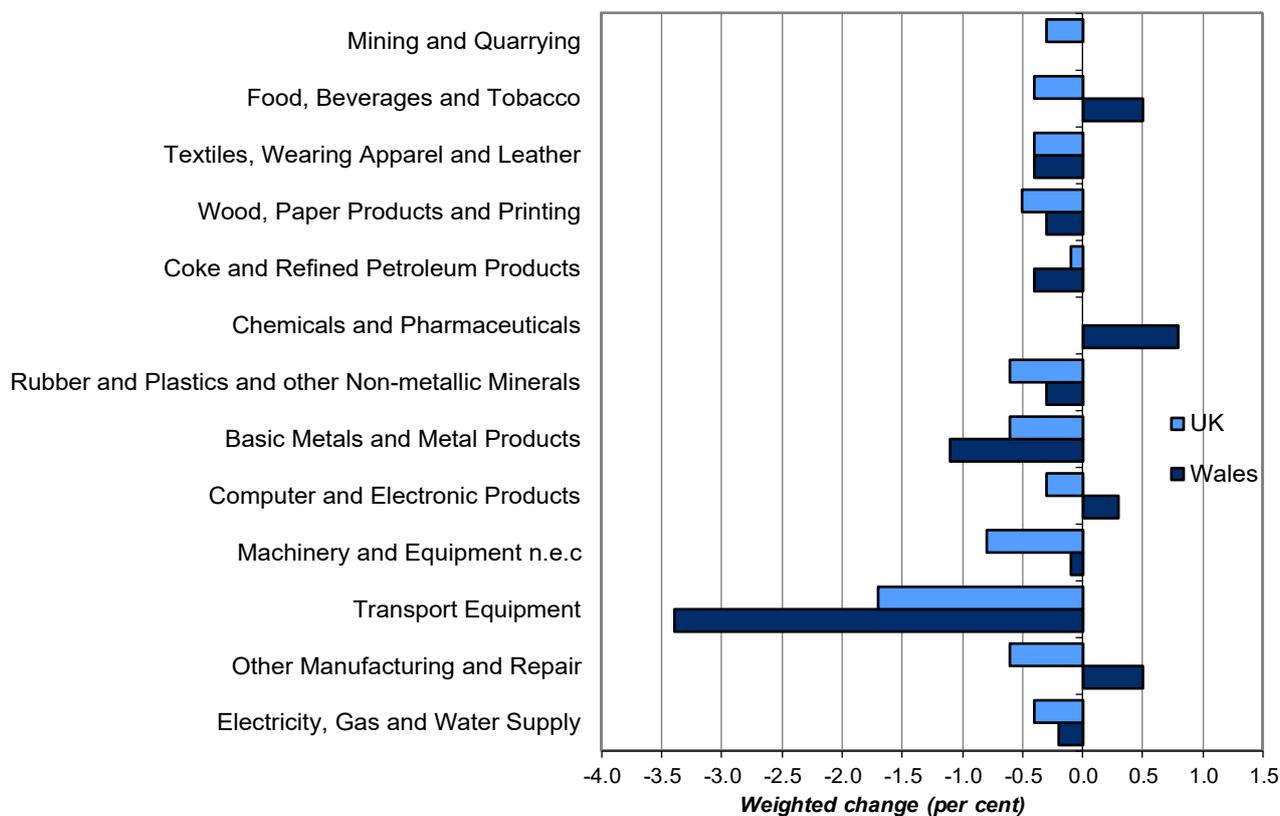
Three industries within the index of production for Wales increased over the quarter, all of the other industries contributed to the overall decrease. The manufacturing of Food, Beverages and Tobacco, Chemicals and Pharmaceuticals and Machinery and Equipment were the only industries to increase in Wales.

Chemicals and Pharmaceuticals was the only industry to increase in both Wales and the UK. The manufacturing of transport equipment contributed the most to the fall in the Index of Production for both Wales and the UK.

Smaller sample sizes in Wales can result in a less stable series. This is particularly the case in the short term but longer term trends are regarded as more reliable.

Chart 4.2 shows the impact of changes in the sub-sectors on the index as a whole for the latest year (based on weighted data).

Chart 4.2: Contribution to overall percentage change, latest four quarters compared with previous four quarters



Source: Short-term Output Indicators, WG and ONS

Just like the Index of Market Services, the quarterly changes have had a big impact when comparing the latest four quarters to the previous quarters. Transport Equipment is again the largest contributor to the Index of Production decrease in both Wales and the UK.

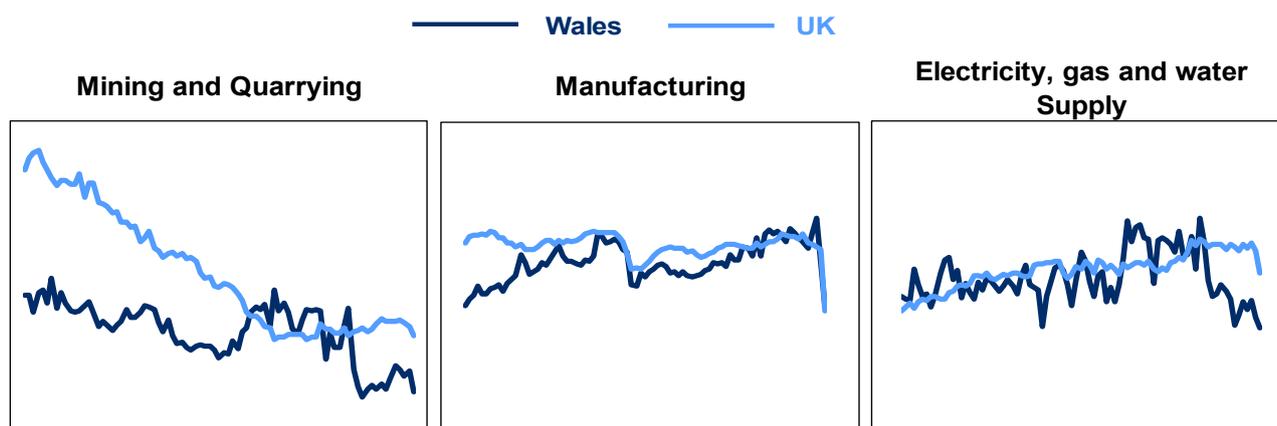
In the UK, no industries have increased over the year. In Wales four industries have increased over the year, the largest positive change being Chemicals and Pharmaceuticals.

5. Index of Production: industry trends

This section shows changes in output since 1999 for the three industries which comprise the Index of Production. The Welsh results can be more volatile than for the UK equivalents because of smaller survey samples.

Table B1 in [Appendix B](#) provides the latest annual and quarterly data for the industries and their sub-sectors. Time series' for the index of production and its sub-indices are available on [StatsWales](#).

Chart 6.1: Production Sub-indices – 1999 Q2 to 2020 Q2, (2016=100)



Source: Short-term output indicators, WG and

Index of Mining and Quarrying

Activity in Mining and Quarrying was relatively flat in Wales over the long term to 2016, when there was a sharp decrease, and has stayed steady since. For the UK as a whole, output fell at a steady rate until 2011 and subsequently plateaued. Comparing the second quarter of 2020 to the previous quarter, the Index of Mining and Quarrying increased by 23.1% in Wales and fell by 7.3% in the UK. In Wales, the latest quarter is the second lowest index on record (lowest was in 2017). In the UK this is the lowest since 2015.

Index of Manufacturing

The index has sharply fallen over the last quarter in both Wales and the UK to the lowest point since the series began. In the latest quarter, activity has fallen by 15.2% in Wales and by 20.2% in the UK.

Historically, there was growth in the Index of Manufacturing in Wales until the recession, which brought a fall across Wales and the UK. The subsequent recovery was stronger in Wales than in the UK. The manufacturing industry is the main driver of the production industries as it accounts for 81.9% of the Index of Production.

Index of Electricity, Gas and Water Supply

The Index of Electricity, Gas and Water Supply in Wales is volatile. There was a sharp increase in 2012 Q2 due to the opening of a new power station in Pembroke. Output has generally decreased since the end of 2016, which can be attributed to the downgrading in operations of Aberthaw power station. The fall has continued due to the pandemic and the series is now the lowest since records began.

Over the quarter, the index has fallen by 4.2% in Wales and by 7.2% in the UK. The large falls over the quarter are mainly due to volume data for gas and electricity significantly decreasing. This is likely due to less usage during the COVID-19 lockdown.

6. Index of Construction

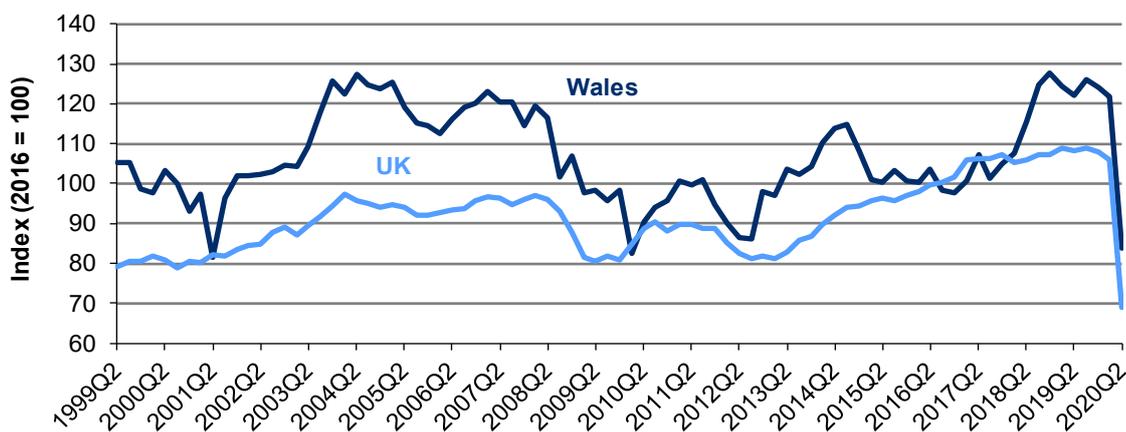
The construction sector accounts for approximately 5.9 per cent of the Welsh economy.

Over the latest quarter the index of construction fell sharply by 31.2% in Wales and by 35.0% in the UK. The Welsh index is now at the lowest it's been since 2010, while the UK index is at its lowest ever point.

Around the recession of 2008-09, both Wales and the UK saw a fall in construction output, with Wales seeing a larger fall than the UK. Since then, output gradually increased overall and reached pre-recession levels until the pandemic.

A time series for the index of construction is available on [StatsWales](#).

Chart 6.1: Index of Construction



Source: Short-term output indicators, WG and ONS

7. Key Quality Information

7.1 Relevance

This release provides estimates of output in market services, production and construction industries for Wales and the UK. The UK production estimates are taken from the Quarterly National Accounts release from the ONS, the construction estimates are taken from the ONS monthly construction release and the UK market services estimates are taken from the Quarterly National Accounts Index of Services release from the ONS. These statistics are used by the Welsh Government to monitor the output for these industries in the Welsh economy as well as providing comparisons with the UK. They are also used by other public sector organisations, businesses, academia and private individuals to identify the key trends in production and construction output for Wales.

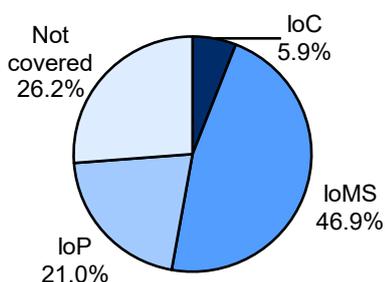
The output indices show the quarterly movements in gross output of the production, construction and market services sectors in Wales. Gross output is used as a proxy for Gross Value Added (GVA), measured by a variety of data sources since GVA cannot currently be measured to a sufficient timeliness for the production of short term indices.

The indices are estimated using a combination of:

- Directly collected data from existing monthly surveys.
- A quarterly top up of specifically Welsh data from large inter-regional businesses.
- Post stratification methodology.
- Volume data from a number of different sources.
- Directly collected data from a small additional quarterly survey sent to wholly Welsh finance businesses.

The majority of the data comes from the ONS Monthly Business Survey. The results from this survey are used to calculate the relative movements of the individual series' and these in turn are weighted together to produce the overall index. The weights are derived from the distribution of GVA for Wales using the Regional Accounts. Both volume and sales data are used to compile the index. GVA is a measure of economic activity at basic prices, which includes taxes (less subsidies) on production but excludes taxes (less subsidies) on products. The sales data are deflated to 2010 prices using the deflators produced for the UK index.

The following pie chart represents the percentage that the Index of Market Services, Index of Production and Index of Construction for Wales have in the overall Regional GVA by industry, based on 2016 GVA in line with the STOI methodology. Industries not covered include agriculture and fishing industries and the public sector.



Source: Short Term Output Indicators, Welsh Government and ONS

7.2 Accuracy

Due to the impact of COVID-19, some response rates for the previous quarter are much lower than the target response rate. Most response rates have improved but most are still below the target response rate. Because of this, the low sample sizes could cause volatility and so estimates should be treated with caution.

Table 7.1: Comparison of response rates from additional Welsh businesses

	Target response	2020 Q2 response	2020 Q1 response
Index of Production	77%	88%	48%
Distribution	87%	69%	69%
Transport	77%	76%	52%
Accommodation and Food Service Activities	75%	63%	63%
Information and Communication Activities	77%	57%	64%
Financial and Insurance Activities	75%	75%	66%
Real Estate Activities	50%	25%	25%
Professional, Scientific and Technical Activities & Administrative and Support Service Activities	66%	76%	83%
Other Services	50%	50%	50%

Estimates are subject to revision. Estimates for individual quarters fluctuate due to random sampling error and therefore it is recommended that emphasis is placed on changes in the average of the latest four quarters compared to the average of the previous four quarters for more volatile series'. The entire time series is open to revisions arising from changes in the seasonally adjusted series from the addition of a new data point, and changes to the last 15 months turnover data from late or revised survey returns. For more information on our [revisions policy](#) see our website. Table 7.2 shows the revisions made (in index points) to the previous quarter's estimates.

Table 7.2: Comparison of Current and Previous Estimates of 2020 Quarter 1 ¹

	Current	Previous	Revision
Index of Production	91.1	90.7	0.4
Manufacturing	94.4	93.7	0.7
Mining and Quarrying	69.8	69.1	0.7
Electricity, Gas & Water	76.9	77.6	-0.7
Construction	121.7	124.5	-2.8
Index of Market Services	102.2	103.5	-1.3
Distribution	107.3	108.6	-1.3
Transport	113.4	115.5	-2.1
Accommodation and Food Service Activities	83.8	88.7	-4.9
Information and Communication Activities	102.4	105.0	-2.7
Financial and Insurance Activities	100.8	100.9	-0.1
Real Estate Activities	101.7	101.9	-0.2
Professional, Scientific and Technical Activities	123.9	122.6	1.3
Administrative and Support Service Activities	100.3	104.8	-4.5
Other Services	79.9	80.6	-0.7

Source: Short-term output indicators, WG and ONS

¹ Numbers in the table have been rounded to one decimal place, therefore there may be slight discrepancies between the constituent items and the overall revision shown.

As described in section 7.5, experimental GDP statistics, which are conceptually similar to these Short Term Output Indicators, are now available for Wales. Comparisons show that the STOI indices of construction and production exhibit similar long-term trends to the equivalent sectors in the GDP statistics. This is particularly the case from 2016 onwards. However, there is significant short-term volatility in both series, particularly at sub-sector levels, meaning that over shorter periods STOI and GDP do not always give similar results. Currently, a market services sector equivalent to STOI is not available through GDP.

7.3 Timeliness and punctuality

This release is published quarterly. It is the earliest official indicator of the performance of the Welsh production and construction industries other than the UK figures which are produced by the Office for National Statistics monthly. There is approximately a 14 week lag between publication and the period to which the release refers to.

7.4 Accessibility and clarity

This First Release and the headline statistics are available on the [Welsh Government Statistics](#) website. Additional information on all three indices is available on [StatsWales](#), in addition to the data from 1998. A Summary [Quality Report](#) containing information on the quality of the Index of Production and Index of Construction as well as a summary of methods used to compile the output is available on our website. The equivalent [report for the Index of Market Services](#) can also be found on our website.

7.5 Comparability and coherence

The Office for National Statistics (ONS) have recently developed the [official statistics for GDP for Wales and the English regions](#). The new statistics, which are based almost exclusively on VAT records, are conceptually similar to STOI – they estimate changes in the output of businesses over a period of time.

For the first publication of these statistics, we published a [statistical headline](#) which draws out the key points for Wales, and a [Chief Statistician's update](#) which describes the new statistics in some more detail. The GDP statistics have been categorised as 'experimental' for the time being.

The GDP data have a more comprehensive coverage of the economy and are comparable with the other countries and regions of the UK. ONS also believe that the GDP data are likely to be a better reflection of the type of business activity taking place regionally. The short term output indicators remain the fastest available measures for Wales however, with a three to four month lag from the reference period, compared with an approximately six month lag for GDP.

Here we compare the annual percentage change for the STOI and GDP estimates in both the construction and production sectors from 2018Q2. We are comparing the percentage changes as this is currently the only comparable data available. Currently, a market services sector equivalent to STOI is not available through GDP.

Table 7.3: Indices of production and construction. Percentage change, quarter on same quarter a year ago, for GDP and STOI

	Production			Construction		
	GDP	STOI	Difference ⁽¹⁾	GDP	STOI	Difference ⁽¹⁾
2018 Q2	3.0	0.5	2.5	-4.2	7.5	-11.7
2018 Q3	1.5	-0.4	1.9	4.3	23.4	-19.1
2018 Q4	-0.2	-1.9	1.7	6.8	22.9	-16.1
2019 Q1	1.0	-1.5	2.5	9.6	18.4	-8.8
2019 Q2	-0.8	-5.8	5.0	3.3	6.6	-3.3
2019 Q3	-1.4	-0.9	-0.5	-0.6	0.3	-0.9

Source: Short-term output indicators, WG and ONS; Quarterly regional GDP, ONS

(1) Percentage point difference between STOI and GDP

Like other economic indicators, both series' can be volatile on a quarterly basis, making interpreting short-term changes difficult.

For the production sector:

2019 Q2 showed the largest difference between the two series with a difference of 5.0 percentage points. The other quarters show a smaller range of differences; between 0.5 and 2.5 percentage points.

For the construction sector:

There were larger differences between the two series' in the construction sector in most quarters compared to the production sector. The largest difference was in 2018 Q3 with the percentage difference between STOI and GDP at 19.1 percentage. The latest quarter shows a 0.9 percentage point difference.

We want to hear from you

We want to hear about how you use STOI and your views on its strengths and limitations in light of the new statistics on GDP for Wales. This will help inform a decision about whether both series will be needed indefinitely. Please email economic.stats@gov.wales with your thoughts. ONS will also carry out a consultation to assess the quality and suitability of the new GDP statistics.

For the time being we will continue to publish STOI alongside GDP to help inform our understanding of their differences and similarities, and their relative strengths and limitations. In theory the benefits of GDP are that they are based on a much larger amount of data, they have full coverage of the economy and, in general, are thought to more accurately classify business activity. STOI meanwhile, has more stable seasonal adjustment (though GDP seasonal adjustment will improve over time) and is more timely.

The UK and Wales estimates in this release are calculated by the Office for National Statistics (ONS) and are comparable as they use the same methodology. Methodologies relating to the components within the Index of Production and Index of Construction are available from the background information tab on the release webpage. The Scottish Government publishes a [GDP](#) measure in place of short-term output indicators. The Northern Ireland Assembly publishes the

Northern Ireland Composite Economic Index ([NICEI](#)), which is also not directly comparable to the Welsh short term output indicators.

Due to difficulties collecting historical data from contributors from earlier time periods, the time series begins in 1998 but early quarters and initial years include a proportion of estimated data. More information is given in the Summary Quality Reports for [Index of Market Services](#) and the [Index of Production and Construction](#)

Throughout the release references to the longer term refer to the latest four quarters compared to the previous four quarters, and references to the short term refer to the current quarter compared to the previous quarter. It is recommended that when looking at the growth rates of volatile series, users should focus on the percentage change over the longer term.

7.6 National Statistics status

The United Kingdom Statistics Authority has designated these statistics as National Statistics, in accordance with the Statistics and Registration Service Act 2007 and signifying compliance with the Code of Practice for Official Statistics.

National Statistics status means that official statistics meet the highest standards of trustworthiness, quality and public value.

All official statistics should comply with all aspects of the Code of Practice for Official Statistics. They are awarded National Statistics status following an assessment by the UK Statistics Authority's regulatory arm. The Authority considers whether the statistics meet the highest standards of Code compliance, including the value they add to public decisions and debate. The designation of these statistics as National Statistics was confirmed in February 2012 following a [full assessment against the Code of Practice](#).

Since the latest review by the Office for Statistics Regulation, we have continued to comply with the Code of Practice for Statistics, and have made the following improvements:

- Eliminated un-necessary tables from bulletin as they are freely available on [StatsWales](#)
- Combined the two releases into one to improve user experience
- Improved visuals and commentary of long terms trends for sub-sectors
- Included comparisons with other conceptually similar statistics such as GDP

It is Welsh Government's responsibility to maintain compliance with the standards expected of National Statistics. If we become concerned about whether these statistics are still meeting the appropriate standards, we will discuss any concerns with the Authority promptly. National Statistics status can be removed at any point when the highest standards are not maintained, and reinstated when standards are restored.

7.7 Well-being of Future Generations Act (WFG)

The Well-being of Future Generations Act 2015 is about improving the social, economic, environmental and cultural well-being of Wales. The Act puts in place seven well-being goals for Wales. These are for a more equal, prosperous, resilient, healthier and globally responsible Wales, with cohesive communities and a vibrant culture and thriving Welsh language. Under section (10)(1) of the Act, the Welsh Ministers must (a) publish indicators (“national indicators”) that must be applied for the purpose of measuring progress towards the achievement of the Well-being goals, and (b) lay a copy of the national indicators before the National Assembly. The 46 national indicators were laid in March 2016.

Information on the indicators, along with narratives for each of the well-being goals and associated technical information is available in the [Well-being of Wales report](#).

Further information on the [Well-being of Future Generations \(Wales\) Act 2015](#).

The statistics included in this release could also provide supporting narrative to the national indicators and be used by public services boards in relation to their local well-being assessments and local well-being plans.

7.8 Further details

Links

This document is available at <https://gov.wales/short-term-output-indicators>

Previous publications of this statistical release contained more extensive tables in Appendix B. All the information contained within these tables can now be found on [StatsWales](#).

Next update

January 2020 (Statistical First Release for 2020 Q3)

We want your feedback

We welcome any feedback on any aspect of these statistics which can be provided by email to economic.stats@gov.wales.

Open Government Licence

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Appendix A: Sections of Standard Industrial Classification¹ in Index of Production, Index of Construction and Index of Market Services

Table A1: Sections and sub-sections in Index of Production

SIC 2007	Description
B	Mining and Quarrying
C	Manufacturing
CA (10-12)	Food products, beverages and tobacco
CB (13-15)	Textiles, wearing apparel and leather products
CC (16-18)	Wood and paper products, and printing
CD (19)	Coke and refined petroleum products
CECF (20-21)	Chemicals and pharmaceuticals
CG (22-23)	Rubber & plastics products, & other non-metallic minerals
CH (24-25)	Basic metals and metal products
CICJ (26-27)	Computer and electronic products
CK (28)	Machinery and equipment n.e.c.
CL (29-30)	Transport equipment
CM (31-33)	Other manufacturing and repair
CIJKL	Engineering and allied industries
CCGM	Other manufacturing
DE	Electricity, gas and water supply

Table A2: Sections in Index of Construction

SIC 2007	Description
F	Construction

Table A3: Sections and sub-sections in Index of Market Services

SIC 2007	Description
G	Distribution
45	Wholesale, Retail Sale & Repair of Motor Vehicles
46	Wholesale Trade except Motor Vehicles
47	Retail Sales except Motor Vehicles
H	Transportation and Storage
49-51	Land, water and air transport
52-53	Warehousing and support activities for transportation; postal and courier activities
I	Accommodation and Food Service Activities
55	Accommodation
56	Food and beverage service activities
J	Information and Communication
JA (58-60)	Publishing, audio-visual and broadcasting activities
JB (61)	Telecommunications
JC (62-63)	Information technology and other information activities
K	Financial and Insurance Activities
L	Real Estate Activities
L x OOD	Real Estate excluding Owner Occupied Dwellings
OOD	Owner Occupied Dwellings
M	Professional, Scientific and Technical Activities
N	Administrative and Support Service Activities
R-T	Other Services

¹ See [UK Standard Industrial Classification of Economic Activities 2007](#) for full category descriptions.

Appendix B: Reference Table

Table B1: Index of Production and Index of Construction for Wales ⁽¹⁾

										<i>SEASONALLY ADJUSTED ⁽²⁾ : 2016 = 100</i>				
2007 STANDARD INDUSTRIAL CLASSIFICATION		Index	Annual Indices		2019				2020		Percentage change: Latest			
Section	Description	Weights ⁽³⁾	2018	2019	Q1	Q2	Q3	Q4	Q1	Q2	4 qtrs to previous 4 qtrs		qtr to previous qtr	
											Wales	UK ⁽⁴⁾	Wales	UK ⁽⁴⁾
B-E	PRODUCTION INDUSTRIES	1000	99.4 (r)	99.2 (r)	96.8 (r)	95.8 (r)	99.8 (r)	104.1 (r)	91.1 (r)	78.7	-4.2	-6.6	-13.7	-16.9
B	Mining and Quarrying	11	57.3 (r)	68.9 (r)	64.4 (r)	74.1 (r)	70.9	66.3 (r)	69.8 (r)	53.7	2.7	-3.8	-23.1	-7.3
C	Manufacturing	819	103.5 (r)	103.5 (r)	101.3 (r)	99.0 (r)	104.5 (r)	109.1 (r)	94.4 (r)	80.0	-4.7	-8.0	-15.2	-20.2
CA	Food, Beverages and Tobacco	144	110.9 (r)	124.7 (r)	121.5 (r)	124.9 (r)	126.5	125.9 (r)	113.4 (r)	124.1	3.3	-3.1	9.4	-9.7
CB	Textiles, Wearing Apparel and Leather	15	141.7 (r)	120.2 (r)	114.3	120.1	126.4	119.9 (r)	90.1 (r)	56.7	-25.8	-13.8	-37.1	-36.5
CC	Wood, Paper Products and Printing	65	110.6 (r)	126.2 (r)	124.9	119.3	127.5 (r)	133.1 (r)	115.8 (r)	71.7	-4.6	-8.6	-38.1	-19.9
CD	Coke and Refined Petroleum Products	48	92.1 (r)	92.1 (r)	86.2	93.3	88.1	100.9	87.8	52.3	-12.0	-8.8	-40.4	-27.2
CE-CF	Chemicals and Pharmaceuticals	91	100.9 (r)	115.5 (r)	121.0 (r)	107.7 (r)	113.8 (r)	119.4 (r)	117.1 (r)	121.8	9.4	0.4	4.0	1.7
CG	Rubber and Plastics and other Non-metallic Minerals	71	98.2 (r)	91.6 (r)	90.7 (r)	90.4 (r)	91.7 (r)	93.6 (r)	95.3 (r)	71.7	-5.9	-10.2	-24.7	-28.1
CH	Basic Metals and Metal Products	118	95.3 (r)	90.9 (r)	94.2 (r)	91.0 (r)	90.5 (r)	87.9 (r)	83.8 (r)	69.8	-11.7	-7.2	-16.8	-21.9
CI-CJ	Computer and Electronic Products	74	106.8 (r)	113.2 (r)	112.1 (r)	107.9 (r)	111.0 (r)	122.0 (r)	109.1 (r)	108.0	4.1	-4.3	-1.0	-11.7
CK	Machinery and Equipment n.e.c	21	105.8 (r)	93.1 (r)	102.3	89.0	87.8	93.4 (r)	93.0 (r)	102.1	-6.0	-16.2	9.8	-28.9
CL	Transport Equipment	180	106.6 (r)	109.0 (r)	108.7 (r)	113.0 (r)	111.4 (r)	102.8 (r)	83.6 (r)	48.9	-20.6	-16.8	-41.4	-49.1
CM	Other Manufacturing and Repair	174	98.8 (r)	77.6 (r)	64.9 (r)	57.0 (r)	82.3	106.1 (r)	72.9	62.3	4.6	-10.0	-14.6	-23.2
CJKL	Engineering and Allied Industries	275	106.6 (r)	108.9 (r)	109.1 (r)	109.8 (r)	109.4 (r)	107.2 (r)	91.2 (r)	68.9	-12.9	-14.5	-24.4	-33.3
CCGM	Other Manufacturing	310	101.1 (r)	91.0 (r)	83.4 (r)	77.7 (r)	93.9 (r)	108.9 (r)	87.0 (r)	66.4	-0.5	-9.6	-23.7	-23.7
DE	Electricity, Gas and Water Supply ⁽⁵⁾	170	82.4 (r)	80.4 (r)	77.8 (r)	82.0 (r)	79.4 (r)	82.4 (r)	76.9 (r)	73.7	-1.5	-2.2	-4.2	-7.2
F	CONSTRUCTION	1000	118.8 (r)	124.1 (r)	124.4 (r)	122.2 (r)	125.9 (r)	123.9 (r)	121.7 (r)	83.7	-8.8	-9.3	-31.2	-35.0

Source: Short Term Output Indicators, Welsh Government and ONS

- (1) Revisions to the series are normally made each quarter to take account both of more recent information and improved seasonal factors
- (2) All series are seasonally adjusted except CB, CC, CD and CK.
- (3) Where the sections are highlighted in bold; the weights sum to the Index of Production (IoP = 1,000). Those sub-sections whose weights are not highlighted sum to the individual section e.g the sum of the weights for sub-sections CC, CG and CM sum to Section CCGM. There may be some apparent slight discrepancies between the constituent items and the total due to rounding.
- (4) UK figures for Production as published by the Office for National Statistics on 30 September 2020 and UK figures for Construction as published by the Office for National Statistics on 11
- (5) Relates to SIC 2007 Sections D - Electricity, Gas and Air Conditioning Supply and Section E - Water Supply; Sewerage, Waste Management and Remediation Activities.
- (r) Data revised since last publication

Table B2: Index of Market Services for Wales ⁽¹⁾

SEASONALLY ADJUSTED ⁽²⁾: 2016 = 100

2007 STANDARD INDUSTRIAL CLASSIFICATION		Index Weights ⁽³⁾	Annual Indices		2019				2020		Percentage change: Latest					
			2018	2019	Q1	Q2	Q3	Q4	Q1	Q2	4 qtrs to previous 4 qtrs	qtr to previous qtr	Wales	UK ⁽⁴⁾	Wales	UK ⁽⁴⁾
Section	Description															
IoMS	MARKET SERVICES	1000	105.3	107.8 (r)	107.4 (r)	109.2 (r)	107.9 (r)	106.5 (r)	102.2 (r)	87.1	-6.0	-4.7	-14.8	-19.4		
G	Distribution	210	109.0	112.3 (r)	110.7 (r)	114.8 (r)	111.6 (r)	112.0 (r)	107.3 (r)	85.0	-6.6	-5.5	-20.8	-20.0		
45	Wholesale, Retail Sale & Repair of Motor Vehicles	187	109.3	117.8 (r)	118.6 (r)	125.2 (r)	112.6 (r)	114.8 (r)	109.7 (r)	65.7	-13.5	-18.4	-40.1	-63.0		
46	Wholesale Trade except Motor Vehicles	270	119.8	132.8 (r)	127.3 (r)	130.8 (r)	132.7	140.2 (r)	130.9 (r)	103.0	1.2	-4.2	-21.4	-16.5		
47	Retail Sales except Motor Vehicles	543	103.5	100.2 (r)	99.8 (r)	103.2 (r)	100.7 (r)	97.0 (r)	94.7 (r)	82.6	-8.6	-2.6	-12.8	-10.4		
H	Transport	65	106.6	131.0 (r)	133.0 (r)	138.4 (r)	129.0 (r)	123.5 (r)	113.4 (r)	93.6	-7.4	-9.0	-17.5	-30.0		
49-51	Land, Water & Air Transport	482	105.1	109.0 (r)	100.6 (r)	110.6 (r)	114.4 (r)	110.6 (r)	99.7 (r)	53.5	-11.9	-15.5	-46.3	-47.6		
52,53	Warehousing & Transport Support Activities; Postal & Courier Activities	518	109.1	152.6 (r)	164.2	165.6	143.8	136.8 (r)	127.3 (r)	131.5	-4.2	-2.0	3.3	-12.8		
I	Accommodation & Food Service Activities	76	100.5	102.1 (r)	99.8 (r)	107.2 (r)	107.0 (r)	94.3 (r)	83.8 (r)	27.5	-22.5	-24.3	-67.2	-86.7		
55	Accommodation	431	104.5	102.0 (r)	96.8 (r)	105.6 (r)	107.7 (r)	97.8 (r)	82.4 (r)	19.4	-24.2	-27.1	-76.5	-91.5		
56	Food & Beverage Service Activities	569	97.4	102.2 (r)	102.0 (r)	108.4 (r)	106.5 (r)	91.7 (r)	84.8 (r)	33.7	-21.2	-23.1	-60.3	-84.7		
J	Information & Communication Activities	61	117.7	106.3 (r)	109.4 (r)	105.5 (r)	103.1 (r)	107.3 (r)	102.4 (r)	94.0	-9.4	-1.5	-8.2	-11.8		
JA	Publishing, Audio Visual & Broadcasting Activities	106	123.2	109.1 (r)	96.9 (r)	120.7 (r)	104.5 (r)	114.4 (r)	114.0 (r)	80.1	-15.0	-6.3	-29.7	-24.9		
JB	Telecommunications	487	134.9	121.8 (r)	124.0 (r)	120.7 (r)	121.4 (r)	121.0 (r)	115.3 (r)	112.6	-8.6	-2.3	-2.4	-6.3		
JC	Information Technology & Other Information Activities	407	95.6	87.1 (r)	95.1	83.3	80.9	89.1	83.8 (r)	75.3	-8.7	1.5	-10.1	-8.0		
K	Financial & Insurance Activities	94	105.9	103.9 (r)	103.3	102.0	104.7 (r)	105.8 (r)	100.8 (r)	96.7	-3.1	-1.8	-4.1	-3.7		
L	Real Estate Activities	266	103.4	103.3 (r)	104.5 (r)	104.0 (r)	103.1 (r)	101.7	101.7 (r)	101.1	-2.3	0.0	-0.5	-3.2		
LXOOD	Real Estate Activities excluding OOD	153	108.5	114.8 (r)	119.8 (r)	117.4 (r)	112.4 (r)	109.8 (r)	108.7 (r)	104.2	-5.7	-1.5	-4.2	-10.5		
OOD	Owner Occupied Dwellings	847	102.5	101.2 (r)	101.8	101.6	101.4	100.3	100.4	100.6	-1.6	0.7	0.2	0.0		
M	Professional, Scientific & Technical Activities	81	107.2	123.5 (r)	120.0 (r)	122.9 (r)	123.1 (r)	127.8 (r)	123.9 (r)	114.0	4.5	-2.9	-8.0	-20.4		
N	Administrative & Support Service Activities	70	109.9	108.8 (r)	105.0 (r)	106.6 (r)	111.6	112.2 (r)	100.3 (r)	83.5	-5.9	-7.0	-16.7	-30.2		
RST	Other Services	77	89.0 (r)	85.3 (r)	87.2	89.6 (r)	85.5 (r)	78.9 (r)	79.9 (r)	56.0	-15.4	-11.7	-29.9	-45.4		

(1) Revisions to the series are normally made each quarter to take account both of more recent information and improved seasonal factors

(2) All series are seasonally adjusted except JC and K.

(3) Where the sections are highlighted in bold; the weights sum to the Index of Market Services (IoMS = 1,000). There may be some apparent slight discrepancies between the constituent items and the total due to rounding.

(4) UK figures as published by the Office for National Statistics on 30 September 2020.

(r) Data revised since last publication