



Short-Term Output Indicators for Wales: July to September 2021

26 January 2022
SFR 22/2022

The short-term output indicators within this release relate to July to September 2021 and therefore part of the coronavirus (COVID-19) pandemic. Care should be taken when interpreting these indices – estimates for individual quarters can fluctuate and it is recommended that and so consideration of longer term trends is recommended. Estimates for Wales are typically more volatile than for the UK and therefore comparisons between Wales and the UK should be treated with caution.

1. Background and Key Points

All three indices increased on an annual basis; the latest four quarters (October 2020 to September 2021) compared to the previous four quarters (which roughly included the first six months of the pandemic) for Wales. On a quarterly basis, two of the three indices showed increases. This follows a period of change with the largest quarterly decreases on record being seen in April to June 2020 (which included part of the initial lockdown period) and the subsequent largest increases on record during July to September 2020 (reflecting the easing of restrictions over the summer months).

Index of Market Services

- On an annual basis, the index of market services **increased** by 6.9% in Wales and by 2.0% in the UK.
- Compared to the previous quarter, the index of market services **increased** by 3.6% in Wales and by 1.9% in the UK.

Index of Production

- On an annual basis, the Index of Production **increased** by 1.5% in Wales and by 3.6% in the UK.
- Comparing to the previous quarter, the index of Production **increased** by 1.0% in Wales and **decreased** slightly in the UK.

Index of Construction

- On an annual basis, the Index of Construction **increased** by 16.4% in Wales and by 10.0% in the UK
- Compared to the previous quarter, the index of construction **decreased** by 1.5% in Wales and by 1.0% in the UK.

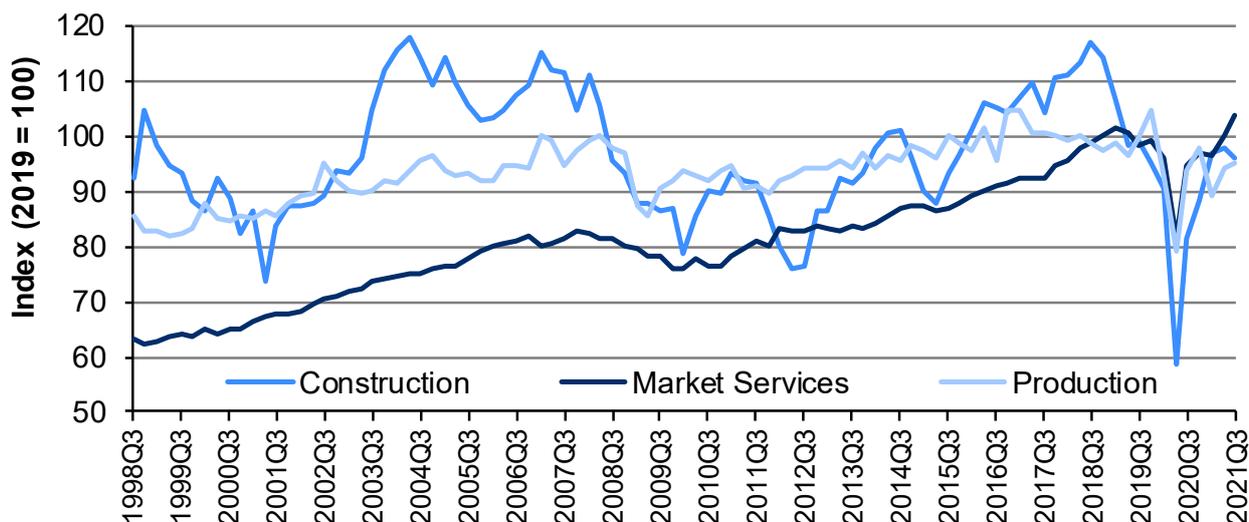
About this release

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 September 2021.

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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) for the 2020 calendar year suggests that GDP decreased by 9.8% during 2020, the largest decrease on record. The latest [UK quarterly gross domestic product](#) (GDP) for July to September 2021 estimated an increase of 1.1%, although GDP still remains below pre-pandemic levels.

There is typically a large element of volatility in short term output indicators and care should be taken when interpreting the data. Another impact of the pandemic, as described by ONS, has been the impact on data collection which might have a greater impact on the Welsh series. Although, response rates in Wales since 2020Q3 have been at or above the target response rate ([see section 7.2](#)).

Short-term output indicator and GDP data form part of the picture of how coronavirus is impacting the Welsh economy. Other data sources such as the latest [labour market indicators](#), the [Business Insights and Conditions Survey](#) and estimates of [Welsh international goods trade](#) also give an indication of the scale of the impact.

Important Quality Information

ONS recently discovered that a business within Financial and Insurance activities had been incorrectly classified. Due to the index of Market Services methodology, reclassifying this individual business would cause a notable and potentially disclosive change within the series that could also potentially be misleading users as to how the Market Services industry was performing. Taking this into consideration, ONS and Welsh Government have made the decision not to carry out the reclassification.

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 79.4%. Electricity, Gas and Water Supply accounts for 19.5% and Mining and Quarrying for 1.1%.

The largest components within Manufacturing are Transport Equipment and, Food, Beverages and Tobacco accounting for 17.5% and 15.4% of Manufacturing, respectively. The smallest component is Textiles, Wearing Apparel & Leather accounting for 1.6% of Manufacturing.

The largest industries within the Index of Market Services for Wales are Real Estate Activities and Distribution accounting for 24.8% and 21.0% respectively. The smallest industries are Transport (accounting for 6.4%) and Other Services (accounting for 6.8%). 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 on an annual basis and the latest quarter for Wales and the UK.

Table 1.1: Seasonally Adjusted Indices of Output for Wales ⁽¹⁾

(2019 = 100)

						Latest percentage change			
	2020		2021			4 qtrs to previous 4 qtrs		qtr to previous qtr	
	Q3	Q4	Q1	Q2	Q3	Wales	UK ⁽²⁾	Wales	UK ⁽²⁾
PRODUCTION	94.1 (r)	97.9 (r)	89.4 (r)	94.1 (r)	95.0	1.5	3.6	1.0	-0.1
Manufacturing	90.6 (r)	96.5 (r)	86.0 (r)	89.9 (r)	91.6	-0.2	5.6	1.9	-0.7
Mining and Quarrying	96.1 (r)	93.9 (r)	91.9 (r)	125.4 (r)	86.4	5.3	-13.3	-31.1	22.2
Electricity, Gas and Water Supply ⁽³⁾	108.1 (r)	103.9 (r)	103.1 (r)	109.6 (r)	109.7	7.8	2.6	0.1	-3.0
CONSTRUCTION	81.3 (r)	88.2 (r)	96.9 (r)	97.8 (r)	96.3	16.4	10.0	-1.5	-1.0
MARKET SERVICES	94.8 (r)	97.0 (r)	96.6 (r)	100.3 (r)	103.9	6.9	2.0	3.6	1.9
Distribution	100.6 (r)	99.0	97.9 (r)	107.9 (r)	108.0	10.8	6.4	0.1	-2.4
Transport	77.1 (r)	87.9	83.9 (r)	78.3 (r)	98.1	4.3	1.2	25.3	5.3
Accommodation & Food Service Activities	72.6 (r)	66.9 (r)	68.3 (r)	99.3 (r)	124.6	28.0	-1.5	25.5	30.7
Information & Communication Activities	100.4 (r)	105.5	102.4 (r)	93.3 (r)	96.3	2.9	1.5	3.2	1.0
Financial & Insurance Activities	99.9 (r)	102.7 (r)	100.7 (r)	100.2 (r)	96.8	1.2	1.8	-3.4	0.3
Real Estate Activities	98.3	98.3 (r)	97.8	98.0	96.9	-0.1	-0.2	-1.1	-0.1
Professional, Scientific & Technical Activities	109.6 (r)	113.5 (r)	121.9 (r)	118.3 (r)	117.1	11.7	4.8	-1.1	0.9
Administrative & Support Service Activities	84.0 (r)	95.8 (r)	101.2 (r)	106.9 (r)	115.5	17.3	-0.9	8.1	3.7
Other Services	88.9 (r)	94.3 (r)	85.6 (r)	86.0 (r)	87.3	0.5	-1.5	1.5	5.6

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 22 December 2021 and UK figures for Construction as published by the Office for National Statistics on 10 December 2021.

(r) Revised data.

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 developed experimental statistics that are conceptually similar to STOI called [GDP for Wales and the English regions](#).

We publish a [statistical headline](#) which draws out the key points for Wales, and a [Chief Statistician's update](#) was published in September 2019 which described 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.

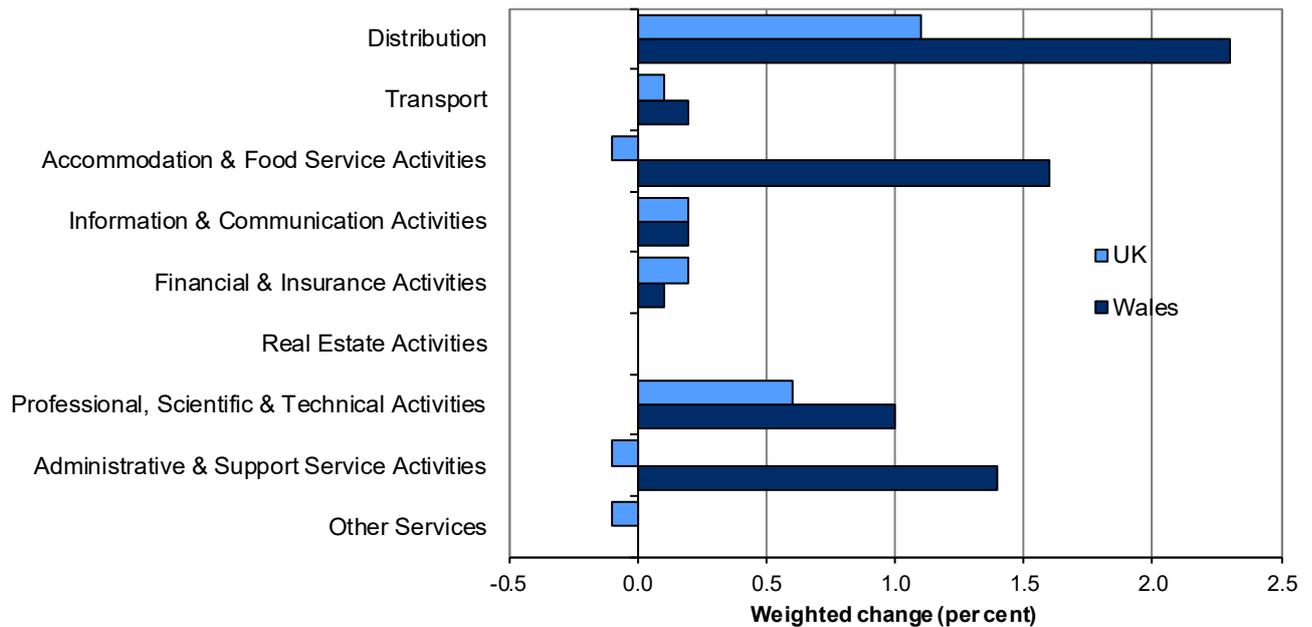
ONS have also recently published their first experimental nowcasting estimates of regional GVA (previously produced by [ESCOE](#)). ONS has also published an article, on these model based estimates, which describes the model and compares the estimates with the subsequent official first [release of the existing ONS' estimates of UK GDP, regions and countries](#).

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 46.0% of the Welsh economy.

Chart 2.1 shows the impact of changes in the sub-sectors on the index as a whole on an annual basis (based on weighted data).

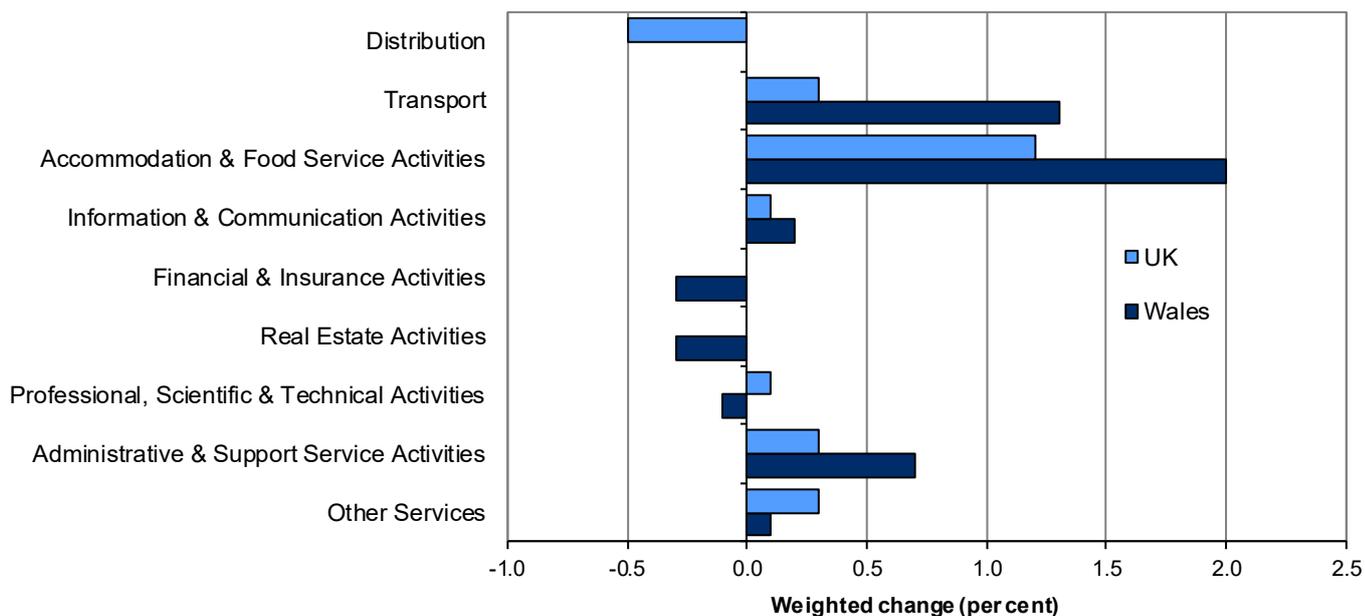
Chart 2.1: Contribution to the annual percentage change (latest four quarters compared with previous four quarters)



Source: Short-term Output Indicators, WG and ONS

In Wales, seven of the nine sub-sectors increased on an annual basis, the remaining two were unchanged. Five of the nine sub-sectors increased in the UK over the same period, with three of the nine seeing a decrease. Four sub-sectors within Wales contributed 1.0% or more to the increase seen in Market Services, with distribution showing the largest growth in both the UK and Wales.

Chart 2.2: Contribution to quarterly percentage change, current quarter compared with previous quarter



Source: Short-term Output Indicators, WG and ONS

The majority of sectors decreased in the previous quarter (January to March 2021), coinciding with the three month lockdown introduced in December 2020. Following the continued relaxation of coronavirus health restrictions, and Wales’ move to alert level 0 on 7 August 2021, Accommodation & Food Service Activities and Transport have both shown a large recovery contributing a weighted change of 1.0% or higher to the overall increase this quarter

In Wales, five of the nine industries increased over the quarter and in the UK, six of the nine industries also had increases over the quarter. Accommodation and food service activities has shown the largest increase in both Wales and the UK.

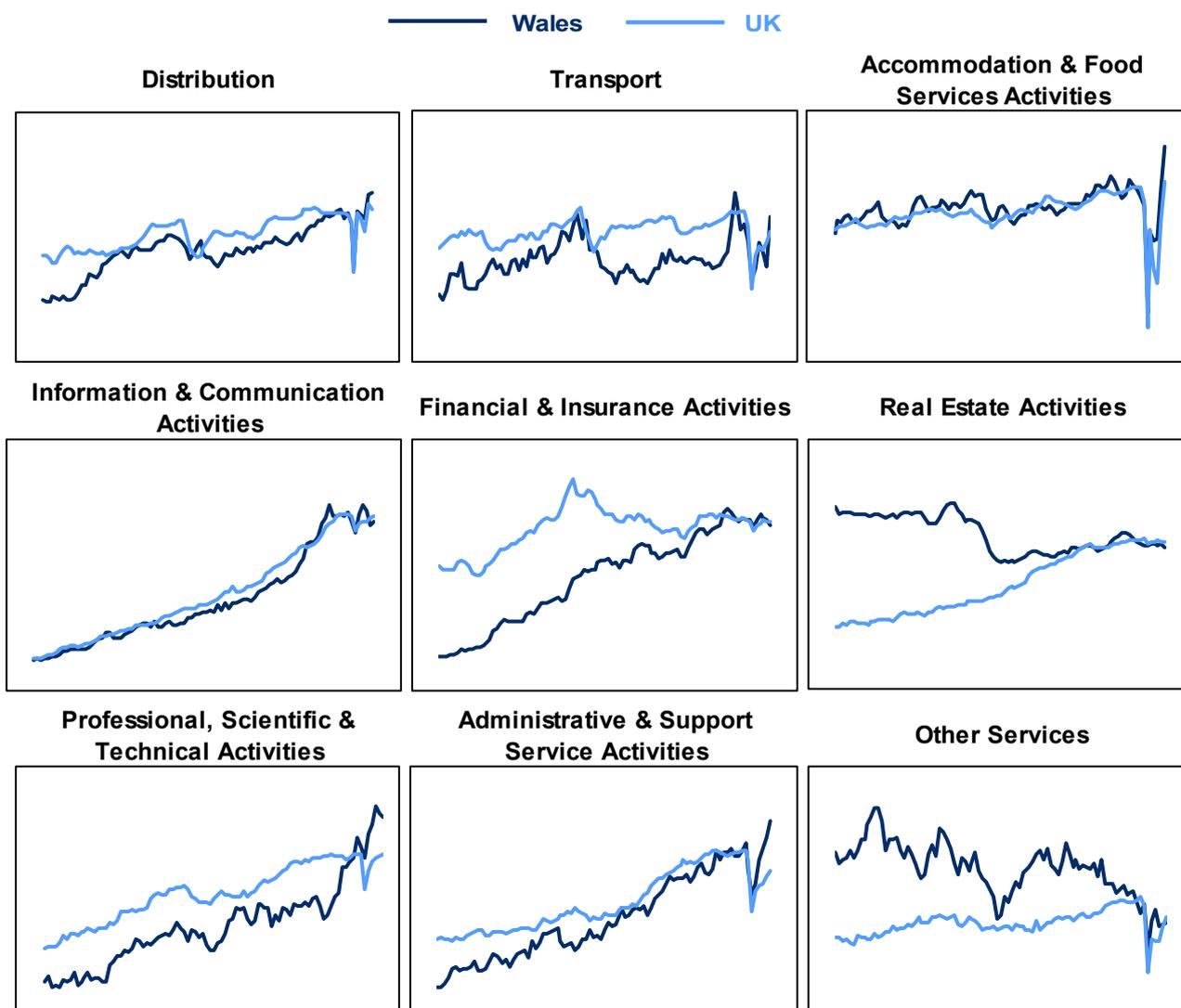
In the UK, only one of the nine industries (Distribution) decreased over the quarter. In Wales, three of the nine industries decreased over the quarter with Financial and insurance activities and Real estate activities both decreasing by a weighted change of 0.3%.

Estimated changes in Wales are typically larger than for the UK, reflecting the smaller sample sizes in Wales which result in less stable series. This is particularly the case in the short term but longer term trends are regarded as reliable.

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 industries 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 – 1998 Q3 to 2021 Q3, (2019=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 start of the coronavirus pandemic. After a lockdown was introduced in December 2020, the index saw a decrease but since then it has begun to increase for both Wales and the UK.

Transport

There was a significant fall in activity in Wales and across the UK during the 2008-09 recession, with the recovery reaching pre-recession peaks in 2019. There was a sharp increase in the Welsh index 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 increased by 4.3% in the year ending Quarter 3 2021 when compared with the same period in the previous year. In the UK, data increased by 1.2% over the same period. The biggest annual contribution within this section comes from Warehousing & Transport support activities, with a 15.5% increase. While Land, Water & Air Transport has decreased by 13.0% over the same period.

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 four quarters, activity in Wales increased by 28.0%. This compares to a decrease of 1.5% in the UK index. This increase is the largest of the nine industries and the largest annual increase within Accommodation and Food Service activities since records began.

Information and Communication Activities

The Index of Information and Communication Activities for both Wales and the UK experienced a decrease due to the pandemic. However, this decrease was not as notable as other industries due to the steady growth in both Wales and the UK since the series began. The Welsh index now exceeds pre-coronavirus levels, with an annual increase of 2.9%.

Financial and Insurance Activities

Since 1999, the Index of Finance and Insurance Activities for Wales has increased with a broadly stable upward trend. In the UK, the sector increased up to 2008 and, after a decrease to 2010, has changed relatively little since. The Welsh index decreased over the quarter but still saw an increase of 1.2% on an annual basis, with the UK index increasing by 1.8% over the same period.

Real Estate Activities

Real Estate Activities continues to be one of the sub-sectors least effected by the pandemic. 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

Professional, Scientific and Technical Activities increased by 11.7% on an annual basis in Wales, the third largest increase of the nine industries. The UK increased by 4.8% over the same time period.

Administrative and Support Service Activities

Administrative and Support Service Activities have increased almost in parallel in both Wales and the UK until the pandemic. Activity in Wales has increased by 17.3% on an annual basis to the highest point in the series, compared to a decrease of 0.9% for the UK. Wales has now recovered to above pre-pandemic levels, whilst the UK index remains below.

Other Services

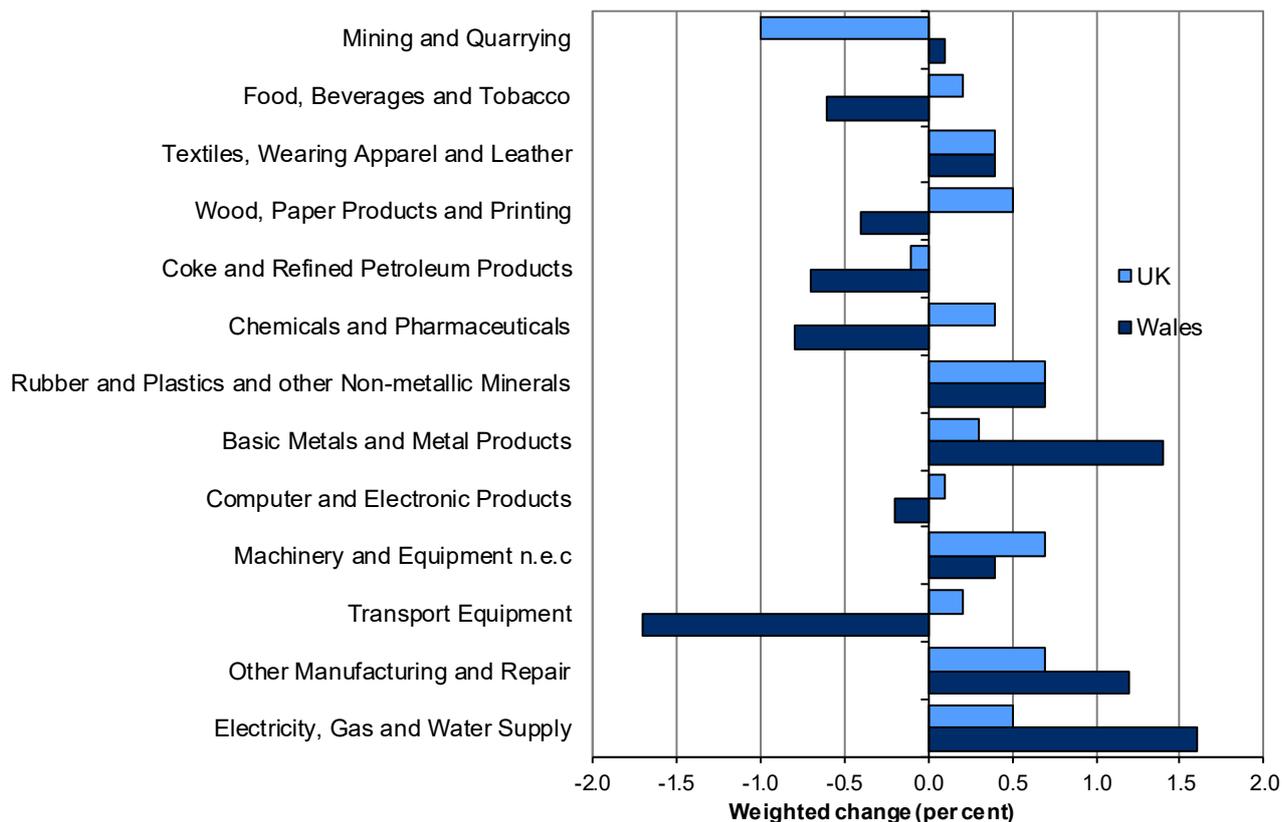
Since 1999, the Index of Other Services for Wales has been volatile, with a decreasing trend overall. The UK trend, by contrast, has seen a relatively stable increase. The series has increased by 0.5% on an annual basis in Wales, the smallest increase of the nine industries. With the UK decreasing by 1.5% over the same period.

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 21.1% of the Welsh economy.

Chart 4.1 shows the impact of changes in the sub-sectors on the index as a whole on an annual basis (based on weighted data).

Chart 4.1: Contribution to the annual percentage change (latest four quarters compared with previous four quarters)

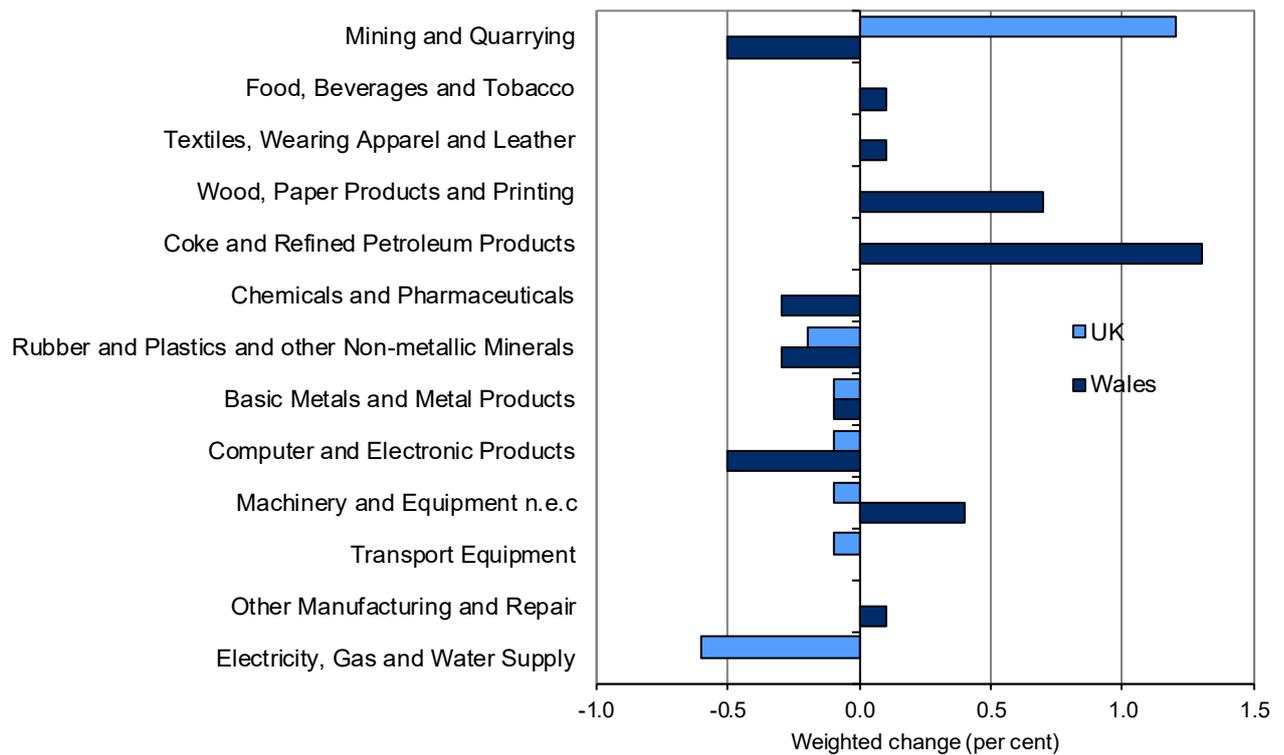


Source: Short-term Output Indicators, WG and ONS

Just like the Index of Market Services, annual change displays a different trend to the quarterly changes. As in the previous four quarters, Transport Equipment is again the largest contributor to the Index of Production decrease in Wales.

In Wales, seven of the thirteen industries experienced increases on an annual basis, with Basic Metals and Metal Products, Other Manufacturing and Repair and Electricity, Gas and Water Supply contributing a weighted change of 1.0% or more. Electricity, gas and water supply increased the most with a contribution of over 1.5% but Transport Equipment saw the largest negative contribution of the Welsh sub-sectors. In the UK, eleven industries increased and two industries decreased with Mining and Quarrying seeing the largest change overall for the UK, with a 1.0% decrease.

Chart 4.2: Contribution to quarterly percentage change, current quarter compared with previous quarter



Source: Short-term Output Indicators, WG and ONS

Six industries within the Index of Production for Wales contributed to the observed increase over the quarter, five industries had decreases and the remaining two sectors were unchanged. Coke and Refined Petroleum Products increased the most followed by Wood, Paper Products and Printing. The two industries that fell the most in Wales were Mining and Quarrying and Computer and Electronic Products.

Six of the thirteen industries contributed to the slight decrease in the UK this quarter with Electricity, Gas and Water Supply decreasing the most. Mining and Quarrying was the only sub-sector to observe an increase this quarter, with an increase of 1.2%.

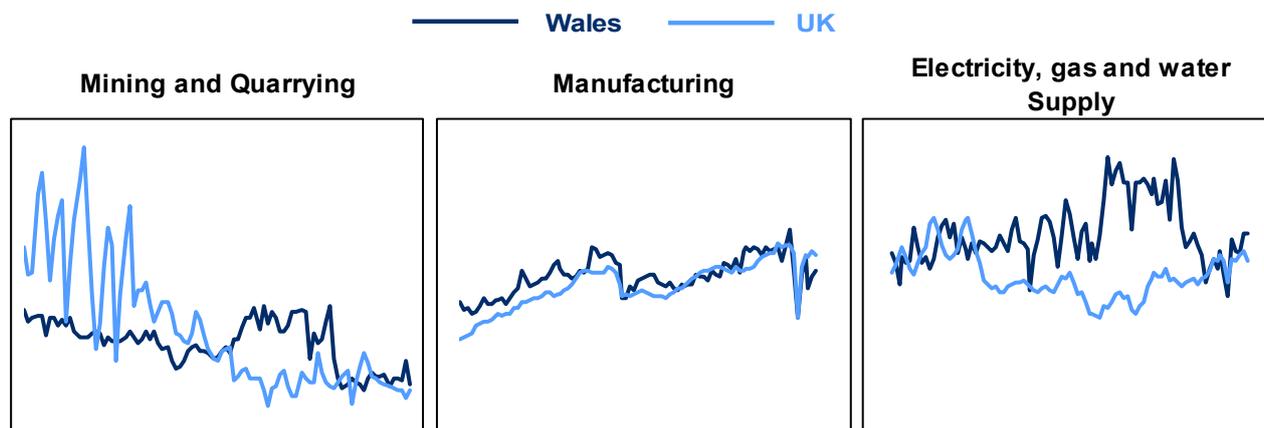
Estimates for changes in Wales are typically larger than for the UK, reflecting the smaller sample sizes in Wales which result in less stable series. This is particularly the case in the short term but longer-term trends are regarded as reliable.

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 5.1: Production Sub-indices – 1998 Q3 to 2021 Q3, (2019=100)



Source: Short-term output indicators, WG and ONS

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 relatively steady since. For the UK as a whole, output fell at a steady rate until 2011 and, despite variations, generally plateaued since. Comparing the latest four quarters to the previous four quarters, the Index of Mining and Quarrying increased by 5.3% in Wales and decreased by 13.3% in the UK.

Index of Manufacturing

Historically, there was growth in the Index of Manufacturing in Wales until the 2008-09 recession, which resulted in a decrease 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 79.4% of the Index of Production.

The index has increased over the last quarter in Wales but is still well above 2020 Q2, one of the lowest points since the series began. The Index of Manufacturing is 0.2% lower over the year in Wales (compared to 5.6% higher in the UK).

Index of Electricity, Gas and Water Supply

The Index of Electricity, Gas and Water Supply in Wales is volatile but follows a similar trend to the Index of Mining and Quarrying. 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 in 2020 Q2 the series reached its lowest level since records began.

Both the UK and Wales' series have now recovered to levels above those seen before the pandemic and the Welsh series is now at the highest point since 2018Q1.

6. Index of Construction

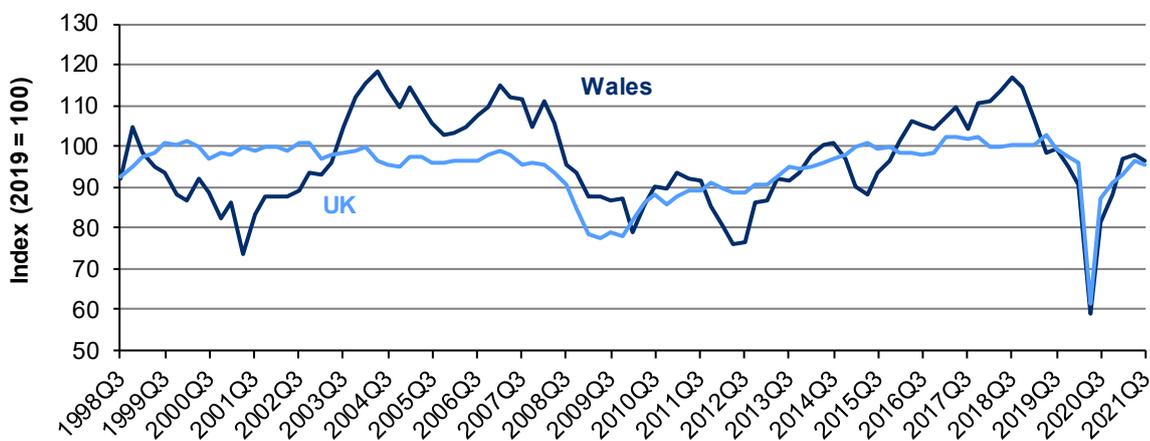
The construction sector accounts for approximately 6.7% of the Welsh economy.

Following 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 where indexes for both Wales and the UK fell to their lowest levels in the series during 2020 Q2.

Unlike the other two indices, the index of construction saw a decrease over the latest quarter by 1.5% in Wales and by 1.0% in the UK. Although, the Welsh index is now 16.4% higher on an annual basis compared to 10.0% higher in the UK over the same period. As Construction had a larger fall than the other two indices following 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.

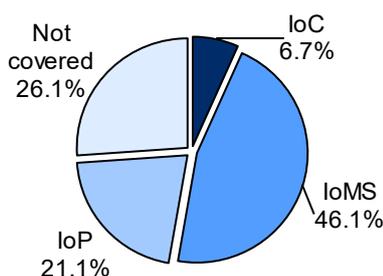
The output indices show the quarterly movements in gross output of the production, construction, and market services sectors in Wales. Gross output is used as a proxy for Gross Value Added (GVA), measured by a variety of data sources since GVA cannot currently be measured.

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', which are 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 2018 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 2020Q1 and Q2 were much lower than the target response rate and should be treated with caution. Response rates are now in line with those seen prior to the pandemic.

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 and rebasing made (in index points) to the previous quarter's estimates.

Table 7.2: Comparison of Current and Previous Estimates of 2021 Quarter 2 ¹

	<u>Current</u>	<u>Previous</u>	<u>Revision</u>
Index of Production	94.1	93.2	0.9
Manufacturing	89.9	88.8	1.1
Mining and Quarrying	125.4	125.1	0.3
Electricity, Gas & Water	109.6	109.3	0.3
Construction	97.8	99.6	-1.8
Index of Market Services	100.3	99.9	0.4
Distribution	107.9	107.3	0.6
Transport	78.3	75.0	3.3
Accommodation and Food Service Activities	99.3	95.7	3.6
Information and Communication Activities	93.3	94.0	-0.7
Financial and Insurance Activities	100.2	106.6	-6.4
Real Estate Activities	98.0	98.0	0.0
Professional, Scientific and Technical Activities	118.3	108.0	10.3
Administrative and Support Service Activities	106.9	113.7	-6.8
Other Services	86.0	82.3	3.7

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 in September 2019, 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.

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.

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 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 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 wellbeing of Wales. The Act puts in place seven wellbeing 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 wellbeing goals, and (b) lay a copy of the national indicators before Senedd Cymru. Under section 10(8) of the Well-being of Future Generations Act, where the Welsh Ministers revise the national indicators, they must as soon as reasonably practicable (a) publish the indicators as revised and (b) lay a copy of them before the Senedd. These national indicators were laid before the Senedd in 2021. The indicators laid on 14 December 2021 replace the set laid on 16 March 2016.

Information on the indicators, along with narratives for each of the wellbeing goals and associated technical information is available in the [Wellbeing 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 wellbeing assessments and local wellbeing 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

April 2022 (Statistical First Release for 2021 Q4)

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⁾

2007 STANDARD INDUSTRIAL CLASSIFICATION		Index Weights ⁽³⁾	SEASONALLY ADJUSTED ⁽²⁾ : 2019 = 100											Percentage change: Latest			
			Annual Indices		2020			2021			4 qtrs to previous 4 qtrs		qtr to previous qtr				
			2019	(r) 2020	Q2	(r) Q3	(r) Q4	Q1	(r) Q2	(r) Q3	Wales	UK ⁽⁴⁾	Wales	UK ⁽⁴⁾			
B-E	PRODUCTION INDUSTRIES	1000	100.0	90.9 (r)	79.0	94.1 (r)	97.9 (r)	89.4 (r)	94.1 (r)	95.0	1.5	3.6	1.0	-0.1			
B	Mining and Quarrying	11	100.0	93.3 (r)	82.4 (r)	96.1 (r)	93.9 (r)	91.9 (r)	125.4 (r)	86.4	5.3	-13.3	-31.1	22.2			
C	Manufacturing	794	100.0	88.9 (r)	76.8	90.6 (r)	96.5 (r)	86.0 (r)	89.9 (r)	91.6	-0.2	5.6	1.9	-0.7			
CA	Food, Beverages and Tobacco	154	100.0	94.0 (r)	98.8 (r)	97.9 (r)	88.5	93.2 (r)	94.8 (r)	95.7	-4.9	1.8	0.9	0.4			
CB	Textiles, Wearing Apparel and Leather	16	100.0	82.2 (r)	47.2	95.7 (r)	110.2	111.4	115.1	119.5	38.2	14.1	3.8	1.4			
CC	Wood, Paper Products and Printing	69	100.0	73.4 (r)	61.2 (r)	67.5 (r)	72.5 (r)	69.0 (r)	73.4 (r)	84.6	-7.9	9.8	15.3	0.8			
CD	Coke and Refined Petroleum Products	42	100.0	77.8 (r)	56.8	78.5	80.8	23.7	62.7	99.8	-21.5	-6.8	59.3	4.5			
CE-CF	Chemicals and Pharmaceuticals	105	100.0	95.5 (r)	100.7 (r)	90.7 (r)	92.7 (r)	93.9 (r)	86.5 (r)	83.0	-9.3	3.9	-4.0	-0.4			
CG	Rubber and Plastics and other Non-metallic Minerals	61	100.0	97.1 (r)	78.8 (r)	99.7 (r)	106.2	109.7 (r)	111.4 (r)	104.9	13.2	13.9	-5.9	-3.4			
CH	Basic Metals and Metal Products	100	100.0	87.8 (r)	74.4 (r)	89.5 (r)	96.0 (r)	103.0	108.8 (r)	108.2	18.6	4.0	-0.6	-1.7			
CI-CJ	Computer and Electronic Products	112	100.0	96.7 (r)	92.7 (r)	99.2 (r)	97.2 (r)	93.0 (r)	101.4 (r)	96.5	-1.9	1.4	-4.8	-1.8			
CK	Machinery and Equipment n.e.c	41	100.0	103.9 (r)	111.2 (r)	102.7 (r)	102.6 (r)	113.9 (r)	113.2 (r)	123.9	10.3	13.3	9.4	-2.3			
CL	Transport Equipment	175	100.0	68.5 (r)	41.1	83.6 (r)	68.7 (r)	62.3 (r)	64.8 (r)	64.6	-14.7	1.6	-0.2	-1.1			
CM	Other Manufacturing and Repair	125	100.0	103.9 (r)	74.0 (r)	92.3 (r)	157.9 (r)	90.7 (r)	93.1 (r)	94.1	11.6	10.3	1.1	-0.1			
CUJL	Engineering and Allied Industries	328	100.0	82.6 (r)	67.4	91.3	82.6 (r)	79.2 (r)	83.3 (r)	82.9	-6.1	8.2	-0.5	-1.6			
CCGM	Other Manufacturing	255	100.0	94.0 (r)	71.7 (r)	87.4 (r)	122.4 (r)	89.4	92.2 (r)	94.1	7.8	11.2	2.1	-0.9			
DE	Electricity, Gas and Water Supply ⁽⁵⁾	195	100.0	99.0 (r)	88.1 (r)	108.1 (r)	103.9 (r)	103.1 (r)	109.6 (r)	109.7	7.8	2.6	0.1	-3.0			
F	CONSTRUCTION	1000	100.0	79.7 (r)	58.8 (r)	81.3 (r)	88.2 (r)	96.9 (r)	97.8 (r)	96.3	16.4	10.0	-1.5	-1.0			

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 22 December 2021 and UK figures for Construction as published by the Office for National Statistics on 10 December 2021.
- (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) Revised figures.

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

SEASONALLY ADJUSTED ⁽²⁾: 2019 = 100

2007 STANDARD INDUSTRIAL CLASSIFICATION		Index Weights ⁽³⁾	Annual Indices		2020				2021			Percentage change: Latest				
			2019	2020	Q2 (r)	Q3 (r)	Q4 (r)	Q1 (r)	Q2 (r)	Q3	4 qtrs to previous 4 qtrs	qtr to previous qtr	Wales	UK ⁽⁴⁾	Wales	UK ⁽⁴⁾
Section	Description															
IoMS	MARKET SERVICES	1000	100.0	92.4 (r)	81.7 (r)	94.8 (r)	97.0 (r)	96.6 (r)	100.3 (r)	103.9	6.9	2.0	3.6	1.9		
G	Distribution	210	100.0	92.9 (r)	76.3 (r)	100.6 (r)	99.0	97.9 (r)	107.9 (r)	108.0	10.8	6.4	0.1	-2.4		
45	Wholesale, Retail Sale & Repair of Motor Vehicles	201	100.0	85.7 (r)	50.6 (r)	101.7 (r)	99.2 (r)	91.1 (r)	114.3 (r)	111.0	21.8	13.9	-2.8	-5.4		
46	Wholesale Trade except Motor Vehicles	321	100.0	88.5 (r)	76.6 (r)	90.6 (r)	90.9 (r)	90.3	100.5 (r)	110.4	7.0	4.0	9.8	0.6		
47	Retail Sales except Motor Vehicles	478	100.0	99.0 (r)	86.9 (r)	106.9 (r)	104.5 (r)	105.9 (r)	110.2 (r)	105.2	9.2	6.1	-4.5	-3.7		
H	Transport	64	100.0	81.6 (r)	72.8 (r)	77.1 (r)	87.9	83.9 (r)	78.3 (r)	98.1	4.3	1.2	25.3	5.3		
49-51	Land, Water & Air Transport	428	100.0	68.8 (r)	51.9 (r)	59.9 (r)	65.7 (r)	64.5 (r)	66.6 (r)	75.1	-13.0	-6.1	12.7	13.4		
52,53	Warehousing & Transport Support Activities; Postal & Courier Activities	572	100.0	93.1 (r)	89.9 (r)	91.7 (r)	106.3	100.3	88.9 (r)	117.5	15.5	8.0	32.1	-1.5		
I	Accommodation & Food Service Activities	78	100.0	63.2 (r)	23.9 (r)	72.6 (r)	66.9 (r)	68.3 (r)	99.3 (r)	124.6	28.0	-1.5	25.5	30.7		
55	Accommodation	314	100.0	61.1 (r)	7.4 (r)	72.2 (r)	76.4 (r)	73.6 (r)	113.0 (r)	143.7	53.1	-4.3	27.1	58.5		
56	Food & Beverage Service Activities	686	100.0	64.1 (r)	31.5 (r)	72.8 (r)	62.6 (r)	65.9 (r)	93.1 (r)	115.9	17.6	-0.4	24.5	21.0		
J	Information & Communication Activities	74	100.0	97.6 (r)	88.7 (r)	100.4 (r)	105.5	102.4 (r)	93.3 (r)	96.3	2.9	1.5	3.2	1.0		
JA	Publishing, Audio Visual & Broadcasting Activities	113	100.0	90.1 (r)	73.4 (r)	81.3 (r)	98.5 (r)	84.9 (r)	87.3 (r)	83.5	-1.8	6.0	-4.3	3.3		
JB	Telecommunications	456	100.0	96.7 (r)	92.7 (r)	95.8	101.8	93.6 (r)	89.4 (r)	87.7	-3.4	0.8	-1.9	2.6		
JC	Information Technology & Other Information Activities	431	100.0	100.5 (r)	88.5	110.3	111.2	116.4 (r)	98.9 (r)	108.7	10.4	-0.2	9.9	-1.0		
K	Financial & Insurance Activities	96	100.0	99.6 (r)	95.7 (r)	99.9 (r)	102.7 (r)	100.7 (r)	100.2 (r)	96.8	1.2	1.8	-3.4	0.3		
L	Real Estate Activities	248	100.0	97.9 (r)	97.5	98.3	98.3 (r)	97.8	98.0	96.9	-0.1	-0.2	-1.1	-0.1		
LXOOD	Real Estate Activities excluding OOD	118	100.0	95.0 (r)	91.4 (r)	94.1	98.2 (r)	92.9	94.0 (r)	94.0	0.9	-3.8	0.0	-1.0		
OOD	Owner Occupied Dwellings	882	100.0	98.3 (r)	98.3	98.8	98.3	98.5	98.5	97.3	-0.3	1.3	-1.2	0.3		
M	Professional, Scientific & Technical Activities	79	100.0	106.7 (r)	99.5 (r)	109.6 (r)	113.5 (r)	121.9 (r)	118.3 (r)	117.1	11.7	4.8	-1.1	0.9		
N	Administrative & Support Service Activities	83	100.0	87.4 (r)	78.2 (r)	84.0 (r)	95.8 (r)	101.2 (r)	106.9 (r)	115.5	17.3	-0.9	8.1	3.7		
RST	Other Services	68	100.0	88.3 (r)	72.2 (r)	88.9 (r)	94.3 (r)	85.6 (r)	86.0 (r)	87.3	0.5	-1.5	1.5	5.6		

(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 22 December 2021.

(r) Revised figures.