



Short-Term Output Indicators for Wales: January to March 2021

29 July 2021
SFR 224/2021

The short-term output indicators within this release relate to January to March 2021 which was during the coronavirus (COVID-19) pandemic. Annual estimates are also included which relate to approximately the first twelve months of the pandemic period. 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.

1. Background and Key Points

All three indices decreased on an annual basis; the latest four quarters (first twelve months of the pandemic) compared to the previous four quarters (twelve months leading up to the pandemic) for both Wales and the UK. On a quarterly basis, two of the indices showed decreases. This follows the largest quarterly decreases on record 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 **decreased** by 7.5% in Wales and by 11.1% the UK. The UK saw the largest decrease since the series began.
- Compared to the previous quarter, the index of market services **decreased** by 0.4% in Wales and decreased by 1.6% in the UK.

Index of Production

- On an annual basis, the Index of Production **decreased** by 8.1% in Wales and by 7.8% in the UK.
- Comparing to the previous quarter, the index of Production **decreased** by 6.0% in Wales and by 0.5% in the UK.

Index of Construction

- The Index of Construction **decreased** by 12.6% in Wales and by 13.4% in the UK on an annual basis.
- Compared to the previous quarter, the index of construction **increased** by 11.3% in Wales and by 2.3% in the UK.

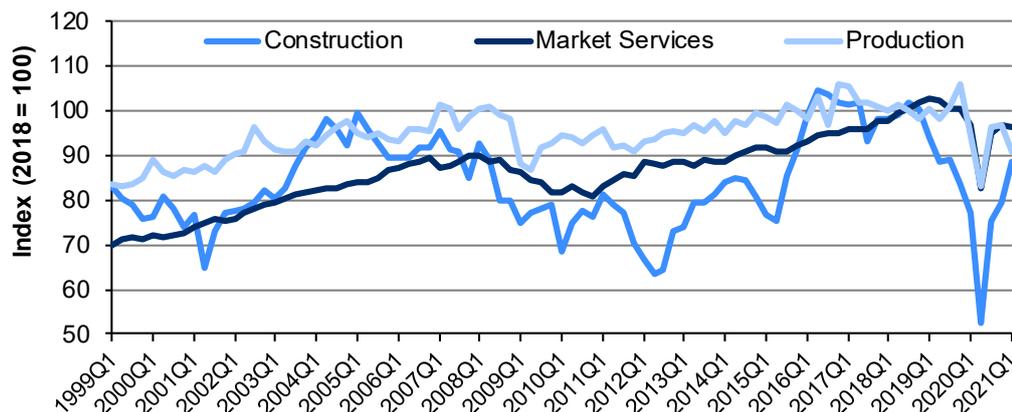
About this release

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 March 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 whole 2020 calendar year suggests that GDP contracted by 9.8% during 2020, the largest decrease on record. The latest [UK quarterly gross domestic product](#) (GDP) for January to March 2021 estimated a small decrease as coronavirus (COVID-19) lockdown restrictions were re-introduced across all four nations of the United Kingdom. GDP still remains below pre-pandemic levels.

However, there is typically a large element of volatility in these estimates. 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 this quarter have increased with most industries 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.

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 79.5%. Electricity, Gas and Water Supply accounts for 19.5% and Mining and Quarrying for 1.0%.

The largest components within Manufacturing are Transport Equipment and, Food, Beverages and Tobacco accounting for 15.6% and 14.7% of Manufacturing, respectively. The smallest component within Manufacturing is Textiles, Wearing Apparel & Leather accounting for 1.2% of Manufacturing.

The largest industries within the Index of Market Services for Wales are Real Estate Activities and Distribution accounting for 26.5% and 20.9% respectively. The smallest industries are Transport (accounting for 6.4%) and Other Services (accounting for 6.6%). 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)

(2018 = 100)

| | 2020 | | | | | 2021 | | | | | Latest percentage change | | | |
|--|-----------------|-----------------|-----------------|-----------------|-------------|---------------------------|-------------------|---------------------|-------------------|--|--------------------------|--|--|--|
| | | | | | Q1 | 4 qtrs to previous 4 qtrs | | qtr to previous qtr | | | | | | |
| | Q1 | Q2 | Q3 | Q4 | | Wales | UK ⁽²⁾ | Wales | UK ⁽²⁾ | | | | | |
| PRODUCTION | 94.7 (r) | 82.9 (r) | 96.5 | 96.9 (r) | 91.1 | -8.1 | -7.8 | -6.0 | -0.5 | | | | | |
| Manufacturing | 94.4 (r) | 81.0 | 93.7 | 95.3 (r) | 88.7 | -10.6 | -9.5 | -6.8 | -1.0 | | | | | |
| Mining and Quarrying | 115.4 (r) | 96.0 (r) | 112.6 | 108.7 (r) | 104.0 | -9.6 | -9.3 | -4.3 | -3.2 | | | | | |
| Electricity, Gas and Water Supply ⁽³⁾ | 94.6 (r) | 89.9 (r) | 106.6 (r) | 102.7 (r) | 99.7 | 2.2 | -2.2 | -2.9 | 2.3 | | | | | |
| CONSTRUCTION | 77.3 (r) | 52.5 (r) | 75.3 (r) | 79.5 (r) | 88.5 | -12.6 | -13.4 | 11.3 | 2.3 | | | | | |
| MARKET SERVICES | 97.0 (r) | 82.6 (r) | 95.2 (r) | 96.8 (r) | 96.3 | -7.5 | -11.1 | -0.4 | -1.6 | | | | | |
| Distribution | 96.1 (r) | 75.6 (r) | 99.9 (r) | 97.3 (r) | 96.4 | -7.6 | -7.2 | -0.9 | -5.7 | | | | | |
| Transport | 104.3 (r) | 89.5 | 94.0 (r) | 107.7 (r) | 101.0 | -13.2 | -17.5 | -6.3 | -1.6 | | | | | |
| Accommodation & Food Service Activities | 88.3 (r) | 24.2 (r) | 82.6 (r) | 69.2 (r) | 67.6 | -37.9 | -53.3 | -2.4 | -18.6 | | | | | |
| Information & Communication Activities | 89.7 (r) | 83.8 (r) | 93.9 (r) | 99.3 (r) | 95.3 | 1.7 | -5.6 | -4.0 | 0.3 | | | | | |
| Financial & Insurance Activities | 90.7 | 87.2 | 90.1 (r) | 95.6 (r) | 96.0 | -3.8 | -3.3 | 0.5 | 0.9 | | | | | |
| Real Estate Activities | 95.8 (r) | 95.5 (r) | 96.4 (r) | 96.5 (r) | 95.8 | -0.9 | -2.6 | -0.7 | 0.4 | | | | | |
| Professional, Scientific & Technical Activities | 126.8 (r) | 114.4 (r) | 115.6 (r) | 115.9 (r) | 129.1 | -1.1 | -7.2 | 11.3 | 0.7 | | | | | |
| Administrative & Support Service Activities | 95.5 (r) | 83.7 (r) | 91.9 (r) | 101.9 | 106.2 | -6.1 | -20.4 | 4.2 | 1.0 | | | | | |
| Other Services | 90.0 (r) | 60.3 (r) | 79.0 (r) | 83.8 (r) | 73.5 | -20.4 | -32.4 | -12.3 | -8.6 | | | | | |

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 30 June 2021 and UK figures for Construction as published by the Office for National Statistics on 11 June 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](#).

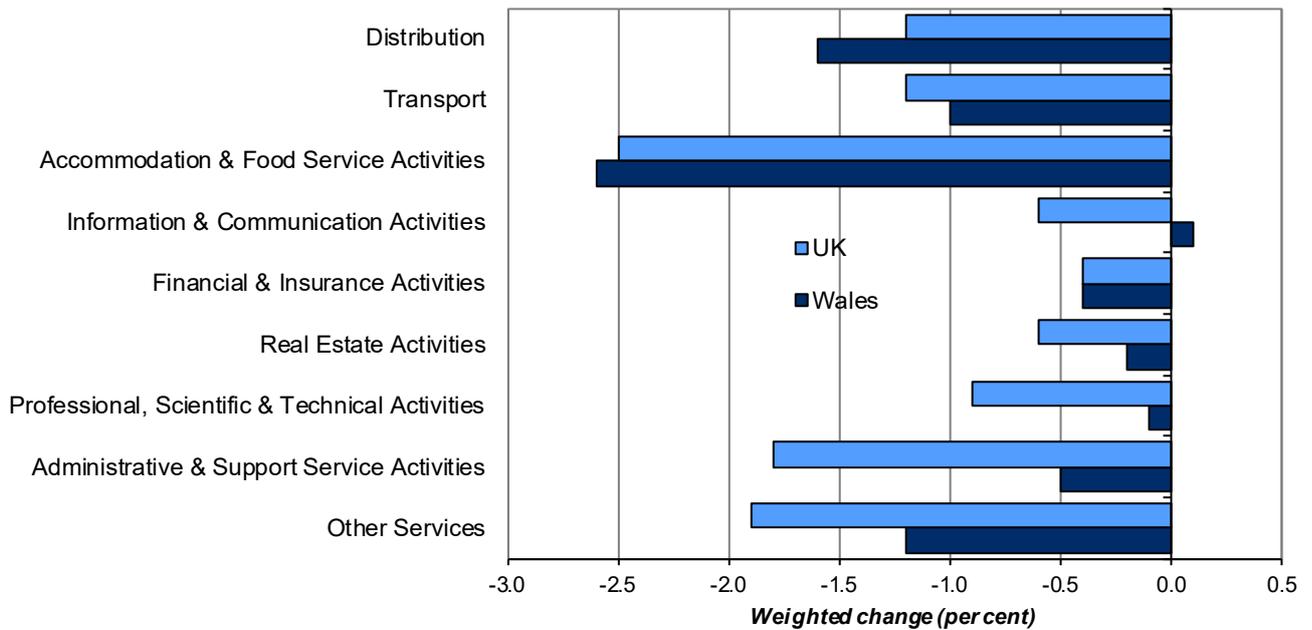
We publish a [statistical headline](#) which draws out the key points for Wales, and a [Chief Statistician's update](#) was published in September 2019 which describes the new statistics in some more detail. More information and comparisons between GDP and STOI can be found in the key quality information 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 46.0% 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).

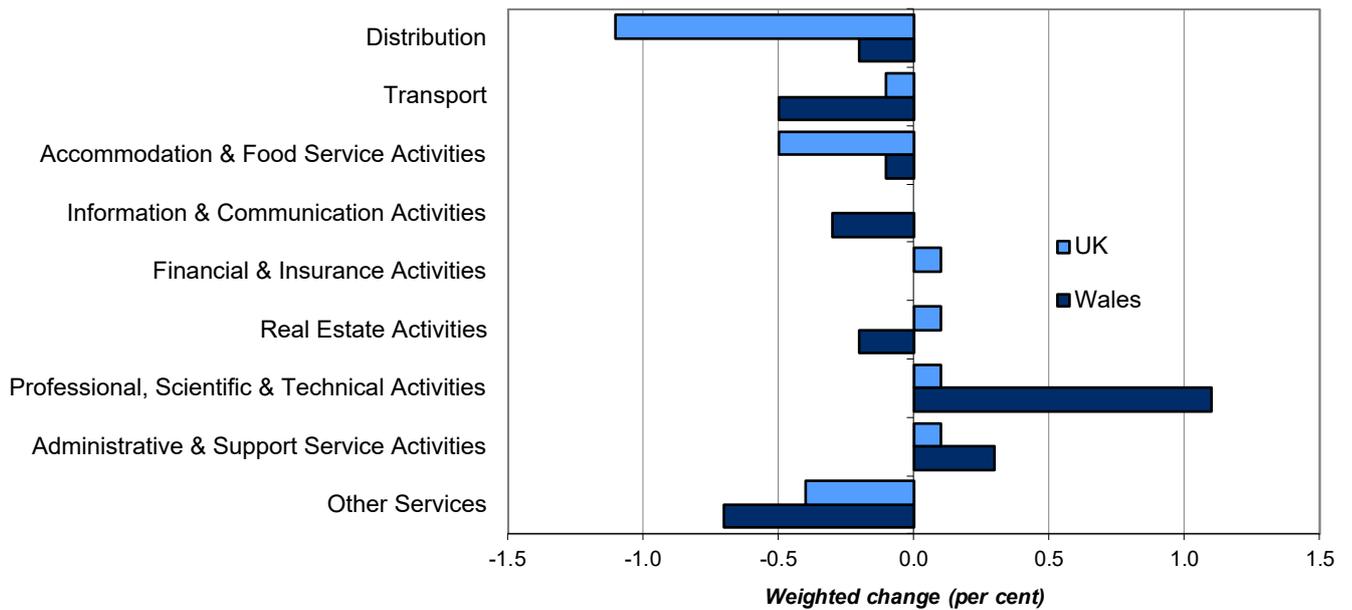
Chart 2.1: Contribution to the annual percentage change (latest four quarters compared with previous four quarters)



Source: Short-term Output Indicators, WG and ONS

In Wales, eight of the nine sub-sectors decreased on an annual basis, with only Information and Communication Activities showing growth. All nine sub-sectors decreased in the UK over the same period. Accommodation and Food Service Activities have understandably decreased the most on an annual basis in Wales and the UK, followed by Distribution, Other Services, and Transport. The UK experienced much larger annual decreases in Administrative & Support Service Activities, Professional, Scientific & Technical Activities and Other Services when compared to Wales.

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



Source: Short-term Output Indicators, WG and ONS

After several sectors increased slightly in the previous quarter, the majority have decreased over the latest quarter, coinciding with the lockdown introduced in December.

In Wales, two of the nine industries increased over the quarter, contrary to the overall slight decrease of market services over the quarter. Four of the nine industries in the UK also had slight increases over the quarter. Professional, Scientific and Technical Activities has shown the largest increase, with it contributing more in Wales than the UK. All sub-indices experienced a weighted change below 1.5% in both Wales and the UK, suggesting very little change from the previous quarter.

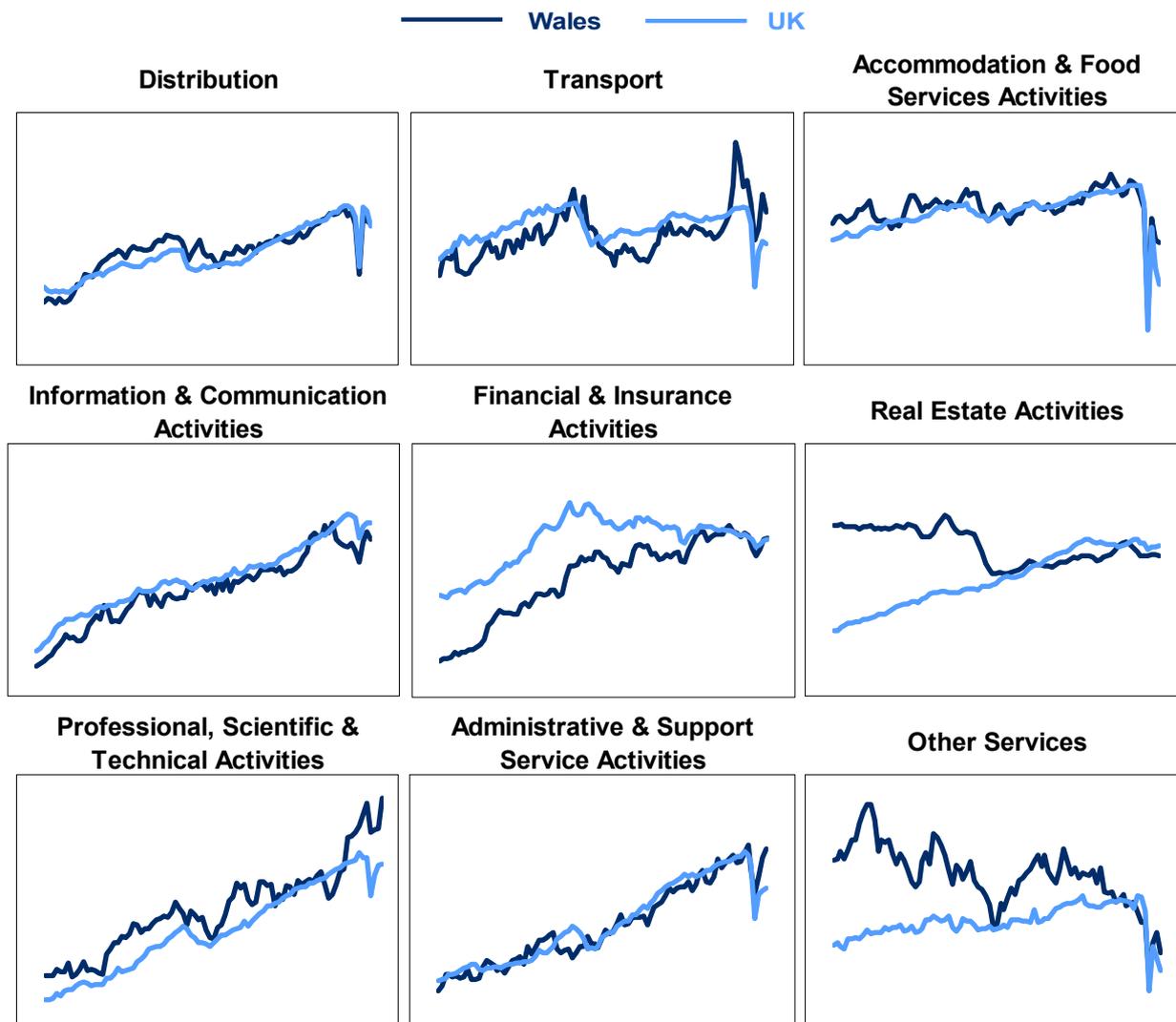
Other Services decreased the most in Wales, while Distribution decreased by the most in the UK. Accommodation & Food Service Activities decreased the second most in the UK, but only had a slight decrease in Wales.

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 – 1999 Q1 to 2021 Q1, (2018=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. It has fallen again during the lockdown introduced in December.

Transport

There was a significant fall in activity in Wales and across the UK during the 2008-09 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 6.3% in Quarter 1 2021 when compared with Quarter 4 2020. The UK data decreased by 1.6% in Quarter 1 2021. Indicating some shrinking due to increasing restrictions at the beginning of the year, and remains below pre-pandemic levels. The biggest annual contribution within this section comes from Land, Water & Air Transport, with a 43.4% decrease. While Warehousing & Transport support activities has increased by 5.0% 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 quarter, activity in Wales remained similar to the previous quarter, compared to the UK index which decreased by 18.6%. The Welsh and UK indexes are also down 37.9% and 53.3% respectively on an annual basis. This decrease is the largest of the nine industries.

Information and Communication Activities

The Index of Information and Communication Activities for both Wales and the UK experienced a decrease due to the pandemic. But it was not as severe 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 1.7%.

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. Despite small increases in the latest quarter, the Welsh and UK indexes are down 3.8% and 3.3% on an annual basis.

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 11.3% over the quarter in Wales to the highest point in the series. The UK increased slightly over the quarter, but not as much as Wales. The index decreased by 1.1% in Wales and decreased by 7.2% in the UK on an annual basis.

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 increased by 4.2% in the latest quarter, compared to an increase of 1.0% for the UK. This is a continuation of the trend seen across most sub-sectors; some recovery but still below pre-pandemic levels.

Other Services

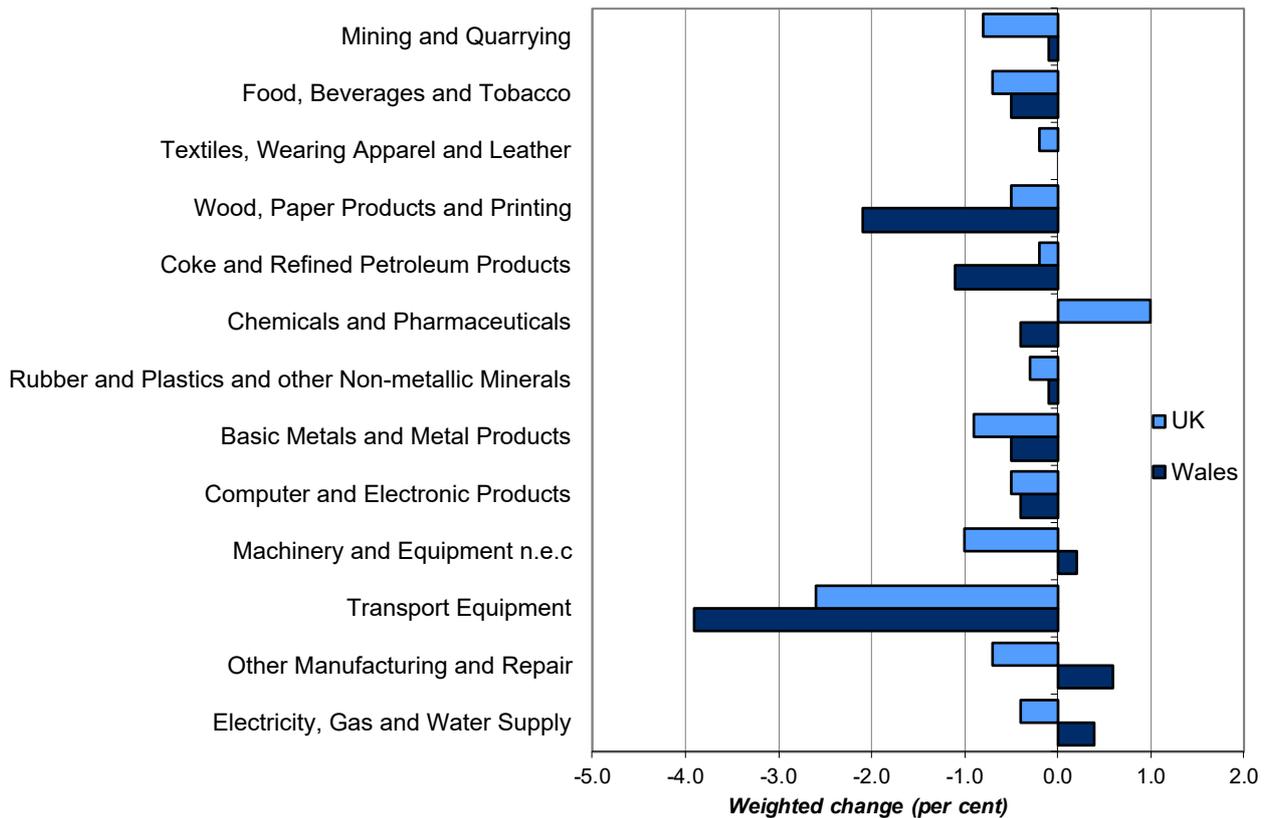
Since 1999, the Index of Other Services for Wales has been volatile, with a decreasing trend overall. The UK trend, by contrast, has been of a relatively stable increase. The latest quarter showed the largest decreases of any sub-sector in Wales (12.3%), with the UK also seeing a large decrease of 8.6%. Although the series isn't near the all-time low of 2020 Q2.

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 21.4% 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)

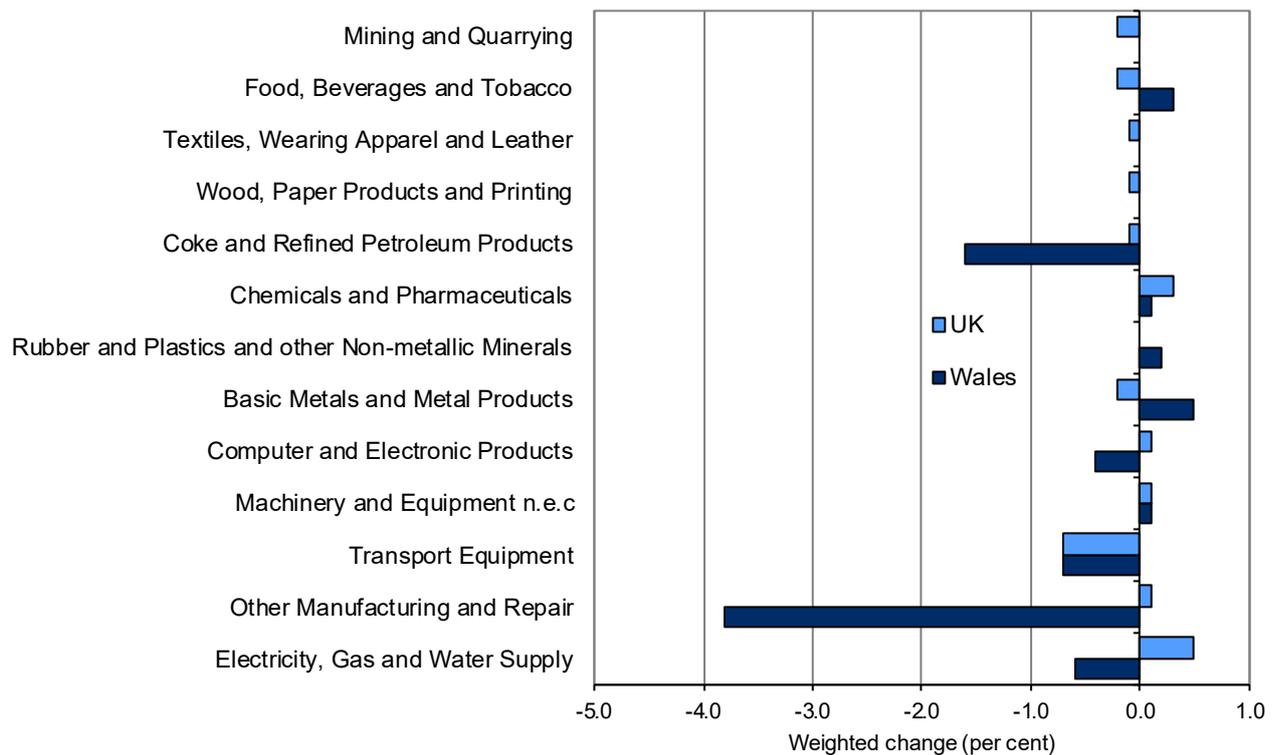


Source: Short-term Output Indicators, WG and ONS

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

In Wales, ten of the thirteen industries experienced decreases on an annual basis, with Transport Equipment, and Wood, Paper Products and Printing decreasing the most. Other Manufacturing and Repair increased the most followed by Electricity, Gas and Water Supply. Whereas, Chemicals and Pharmaceuticals was the only industry to increase annually in the UK. Machinery and Equipment not elsewhere classified showed a small annual increase in Wales, however, this industry was the second largest contributor to the annual decrease in the UK.

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



Source: Short-term Output Indicators, WG and ONS

Five industries within the Index of Production for Wales contributed to the observed decrease over the quarter, five industries had small increases and the remaining three were unchanged. Other Manufacturing and Repair decreased the most followed by Coke and Refined Petroleum Products. Other Manufacturing and Repair seems to be the industry most effected by lockdown restrictions as it had the largest quarterly increase in the previous quarter. The Coke and Refined Petroleum Products decrease is partially down to decreased demand during lockdown that began in December, but also down to refinery maintenance. Most other industries showed little to-no change compared to the previous quarter.

In the UK, seven of the thirteen industries contributed to the fall this quarter with Electricity, Gas and Water Supply increasing the most. Though, much like Wales, the majority of industries showed very slight changes compared to the previous quarter.

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 – 1999 Q4 to 2021 Q1, (2018=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 steady since. For the UK as a whole, output fell at a steady rate until 2011 and subsequently plateaued. Comparing the latest four quarters to the previous four quarters, the Index of Mining and Quarrying decreased by 9.6% in Wales and 9.3% in the UK.

Index of Manufacturing

Historically, there was growth in the Index of Manufacturing in Wales until the 2008-09 recession, which brought 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 79.5% of the Index of Production.

The index has fallen over the last quarter in both Wales and the UK but is still well above the lowest point since the series began in 2020 Q2. In the latest quarter, activity has increased by 6.8% in Wales and by 1.0% in the UK. The Index of Manufacturing remains 10.6% lower on an annual basis in Wales (compared to 9.5% lower 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 the series reached its lowest level since records began in 2020 Q2.

Over the year, the index has increased by 2.2% in Wales but decreased by 2.2% in the UK. Output decreased by 2.9% over the latest quarter in Wales and increasing by 2.3% in the UK.

6. Index of Construction

The construction sector accounts for approximately 6.2% of the Welsh economy.

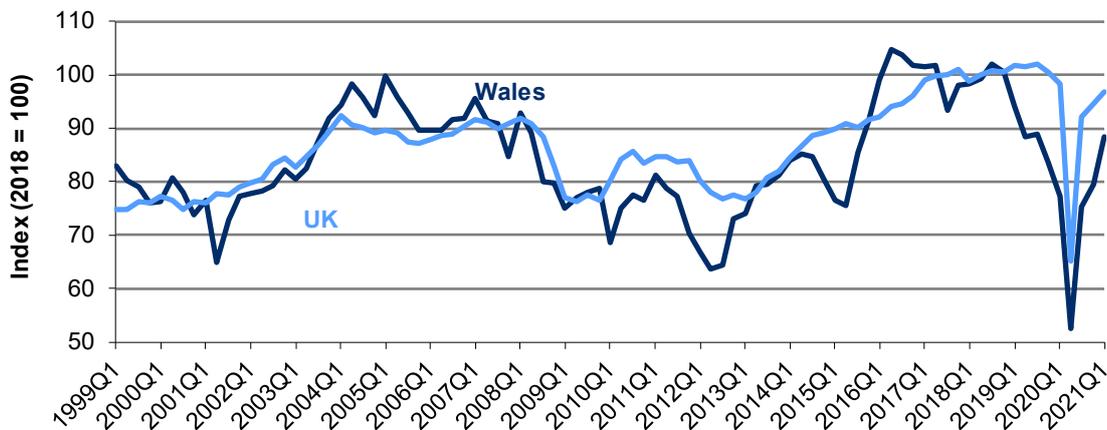
Following a quality assurance review of the input data into this model, in part to reflect the impact of COVID-19, ONS resumed publication of the sub-national construction output dataset (Table 2) on 12 May 2021. This dataset now contains quarterly sub-national (Table 2) data for the first time from Quarter 1 (Jan to Mar) 2020 to Quarter 1 2021. Revisions have also been taken on to data for periods prior to Quarter 1 2020 to reflect these improvements.

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.

Despite decreases over the quarter for both market services and production, the index of construction increased by 11.3% in Wales and by 2.3% in the UK over the latest quarter. While improved compared to the previous quarter, the Welsh index remains 12.6% lower on an annual basis compared to 13.4% lower in the UK over the same period.

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.

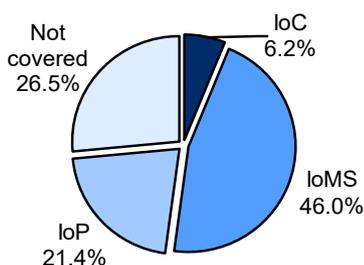
The output indices show the quarterly movements in gross output of the production, construction, and market services sectors in Wales. Gross output is used as a proxy for Gross Value Added (GVA), measured by a variety of data sources since GVA cannot currently be measured.

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 more 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 2020 Quarter 4 ¹

| | <u>Current</u> | <u>Previous</u> | <u>Revision</u> |
|---|----------------|-----------------|-----------------|
| Index of Production | 96.9 | 97.1 | -0.2 |
| Manufacturing | 95.3 | 95.4 | -0.2 |
| Mining and Quarrying | 108.7 | 109.4 | -0.6 |
| Electricity, Gas & Water | 102.7 | 102.9 | -0.2 |
| Construction | 79.5 | 104.7 | -25.2 |
| Index of Market Services | 96.8 | 97.0 | -0.2 |
| Distribution | 97.3 | 98.3 | -1.0 |
| Transport | 107.7 | 108.0 | -0.2 |
| Accommodation and Food Service Activities | 69.2 | 65.6 | 3.6 |
| Information and Communication Activities | 99.3 | 98.6 | 0.8 |
| Financial and Insurance Activities | 95.6 | 95.1 | 0.5 |
| Real Estate Activities | 96.5 | 98.4 | -1.9 |
| Professional, Scientific and Technical Activities | 115.9 | 115.0 | 0.9 |
| Administrative and Support Service Activities | 101.9 | 101.9 | 0.0 |
| Other Services | 83.8 | 82.5 | 1.3 |

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 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 Senedd Cymru. 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

October 2021 (Statistical First Release for 2021 Q2)

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

All content is available under the [Open Government Licence v3.0](#), except where otherwise stated.



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⁾ : 2018 = 100</i> | | | |
|--|---|------------------------|-----------------------|--------------|------------------|------------------|-----------------|------------------|------------------|--------------|--|-------------------|---------------------|-------------------|
| 2007 STANDARD INDUSTRIAL CLASSIFICATION | | Index | Annual Indices | | 2019 | 2020 | | | | 2021 | Percentage change: Latest | | | |
| Section | Description | Weights ⁽³⁾ | 2019 | (r) 2020 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | 4 qtrs to previous 4 qtrs | | qtr to previous qtr | |
| | | | | | | | | | | | Wales | UK ⁽⁴⁾ | Wales | UK ⁽⁴⁾ |
| B-E | PRODUCTION INDUSTRIES | 1000 | 101.4 (r) | 92.7 | 106.0 (r) | 94.7 (r) | 82.9 (r) | 96.5 | 96.9 (r) | 91.1 | -8.1 | -7.8 | -6.0 | -0.5 |
| B | Mining and Quarrying | 10 | 115.5 (r) | 108.2 | 112.5 (r) | 115.4 (r) | 96.0 (r) | 112.6 | 108.7 (r) | 104.0 | -9.6 | -9.3 | -4.3 | -3.2 |
| C | Manufacturing | 795 | 102.1 (r) | 91.1 | 107.4 (r) | 94.4 (r) | 81.0 | 93.7 | 95.3 (r) | 88.7 | -10.6 | -9.5 | -6.8 | -1.0 |
| CA | Food, Beverages and Tobacco | 147 | 113.5 (r) | 106.7 | 119.5 (r) | 102.2 (r) | 111.6 (r) | 111.9 (r) | 101.0 (r) | 103.3 | -4.2 | -6.2 | 2.2 | -1.9 |
| CB | Textiles, Wearing Apparel and Leather | 12 | 90.3 (r) | 74.7 | 100.8 | 69.4 | 42.7 | 86.7 | 99.8 (r) | 100.9 | -5.8 | -7.7 | 1.1 | -2.1 |
| CC | Wood, Paper Products and Printing | 78 | 115.6 (r) | 85.0 | 119.3 (r) | 106.0 (r) | 68.3 (r) | 82.1 (r) | 83.4 (r) | 83.7 | -30.0 | -11.3 | 0.4 | -1.2 |
| CD | Coke and Refined Petroleum Products | 34 | 100.0 (r) | 77.8 | 109.5 | 95.3 | 56.8 | 78.5 | 80.8 | 23.7 | -40.3 | -22.4 | -70.7 | -7.9 |
| CE-CF | Chemicals and Pharmaceuticals | 97 | 116.4 (r) | 111.4 | 120.4 (r) | 117.0 (r) | 116.5 (r) | 103.8 (r) | 108.5 (r) | 109.6 | -4.6 | 10.7 | 1.0 | 2.7 |
| CG | Rubber and Plastics and other Non-metallic Minerals | 67 | 94.0 (r) | 91.5 | 94.3 (r) | 97.9 (r) | 74.6 | 93.2 (r) | 100.4 (r) | 103.8 | -2.2 | -5.2 | 3.4 | 0.6 |
| CH | Basic Metals and Metal Products | 124 | 95.4 (r) | 84.0 | 91.3 (r) | 85.9 (r) | 72.1 (r) | 85.9 (r) | 91.9 (r) | 97.1 | -6.0 | -11.5 | 5.7 | -2.6 |
| CI-CJ | Computer and Electronic Products | 113 | 106.4 (r) | 102.4 | 111.5 (r) | 103.6 (r) | 99.7 (r) | 104.2 (r) | 102.0 (r) | 97.8 | -4.4 | -7.6 | -4.1 | 0.7 |
| CK | Machinery and Equipment n.e.c | 38 | 88.1 (r) | 91.7 | 86.9 (r) | 87.7 (r) | 97.7 (r) | 90.9 (r) | 90.5 (r) | 95.3 | 9.4 | -17.1 | 5.3 | 2.8 |
| CL | Transport Equipment | 156 | 101.7 (r) | 69.2 | 101.1 (r) | 81.1 (r) | 42.4 | 85.3 (r) | 67.9 (r) | 62.2 | -32.9 | -24.9 | -8.4 | -7.7 |
| CM | Other Manufacturing and Repair | 134 | 81.7 (r) | 86.8 | 107.8 (r) | 76.7 (r) | 67.9 (r) | 84.1 (r) | 118.7 (r) | 84.3 | 6.6 | -11.1 | -29.0 | 1.7 |
| CIJKL | Engineering and Allied Industries | 307 | 101.9 (r) | 85.4 | 103.5 (r) | 91.0 (r) | 72.4 (r) | 93.6 (r) | 84.5 (r) | 80.7 | -16.0 | -14.7 | -4.5 | -2.7 |
| CCGM | Other Manufacturing | 279 | 94.0 (r) | 87.5 | 107.7 (r) | 89.9 (r) | 69.6 (r) | 85.7 (r) | 104.6 (r) | 88.9 | -7.6 | -8.6 | -15.1 | 0.5 |
| DE | Electricity, Gas and Water Supply ⁽⁵⁾ | 195 | 97.6 (r) | 98.4 | 100.3 | 94.6 (r) | 89.9 (r) | 106.6 (r) | 102.7 (r) | 99.7 | 2.2 | -2.2 | -2.9 | 2.3 |
| F | CONSTRUCTION | 1000 | 88.8 (r) | 71.1 | 83.6 (r) | 77.3 (r) | 52.5 (r) | 75.3 (r) | 79.5 (r) | 88.5 | -12.6 | -13.4 | 11.3 | 2.3 |

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 June 2021 and UK figures for Construction as published by the Office for National Statistics on 11 June 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) : 2018 = 100

| 2007 STANDARD INDUSTRIAL CLASSIFICATION | | Index Weights ⁽³⁾ | Annual Indices (r) 2019 | | | | | | | 2021 | Percentage change: Latest | | | |
|---|---|------------------------------|-------------------------|--------------|------------------|------------------|------------------|------------------|------------------|--------------|---------------------------|-------------------|---------------------|-------------------|
| | | | 2019 | | 2020 | | | | | | 4 qtrs to previous 4 qtrs | | qtr to previous qtr | |
| Section | Description | | 2019 (r) | 2020 (r) | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Wales | UK ⁽⁴⁾ | Wales | UK ⁽⁴⁾ |
| IoMS | MARKET SERVICES | 1000 | 101.7 | 92.9 | 100.7 (r) | 97.0 (r) | 82.6 (r) | 95.2 (r) | 96.8 (r) | 96.3 | -7.5 | -11.1 | -0.4 | -1.6 |
| G | Distribution | 209 | 101.4 | 92.2 | 101.1 (r) | 96.1 (r) | 75.6 (r) | 99.9 (r) | 97.3 (r) | 96.4 | -7.6 | -7.2 | -0.9 | -5.7 |
| 45 | Wholesale, Retail Sale & Repair of Motor Vehicles | 187 | 107.3 | 91.7 | 104.7 (r) | 97.0 (r) | 54.5 (r) | 108.3 (r) | 107.2 | 97.3 | -11.3 | -21.7 | -9.2 | -16.9 |
| 46 | Wholesale Trade except Motor Vehicles | 270 | 108.2 | 94.5 | 111.8 (r) | 103.3 (r) | 81.1 (r) | 96.9 (r) | 96.5 (r) | 96.1 | -14.0 | -7.0 | -0.5 | -0.3 |
| 47 | Retail Sales except Motor Vehicles | 543 | 95.3 | 91.1 | 93.5 | 91.5 (r) | 80.1 (r) | 98.6 (r) | 94.2 (r) | 96.3 | -1.9 | -2.8 | 2.2 | -6.1 |
| H | Transport | 64 | 119.1 | 98.9 | 113.5 (r) | 104.3 (r) | 89.5 | 94.0 (r) | 107.7 (r) | 101.0 | -13.2 | -17.5 | -6.3 | -1.6 |
| 49-51 | Land, Water & Air Transport | 482 | 103.8 | 67.3 | 107.0 (r) | 96.3 (r) | 50.0 (r) | 59.6 (r) | 63.5 (r) | 61.6 | -43.4 | -32.8 | -2.9 | -4.7 |
| 52,53 | Warehousing & Transport Support Activities; Postal & Courier Activities | 518 | 129.9 | 121.0 | 118.3 (r) | 110.1 (r) | 117.0 | 118.0 (r) | 138.7 (r) | 128.5 | 5.0 | 0.9 | -7.4 | 0.5 |
| I | Accommodation & Food Service Activities | 69 | 102.3 | 66.1 | 96.6 (r) | 88.3 (r) | 24.2 (r) | 82.6 (r) | 69.2 (r) | 67.6 | -37.9 | -53.3 | -2.4 | -18.6 |
| 55 | Accommodation | 431 | 98.0 | 63.1 | 96.7 (r) | 82.6 (r) | 8.1 (r) | 87.4 (r) | 74.5 (r) | 69.4 | -36.4 | -65.5 | -6.8 | -28.4 |
| 56 | Food & Beverage Service Activities | 569 | 104.8 | 67.7 | 96.6 (r) | 91.5 (r) | 33.3 (r) | 79.9 (r) | 66.2 (r) | 66.5 | -38.7 | -48.2 | 0.5 | -16.1 |
| J | Information & Communication Activities | 71 | 92.4 | 91.7 | 93.3 (r) | 89.7 (r) | 83.8 (r) | 93.9 (r) | 99.3 (r) | 95.3 | 1.7 | -5.6 | -4.0 | 0.3 |
| JA | Publishing, Audio Visual & Broadcasting Activities | 106 | 91.1 | 81.8 | 91.6 (r) | 97.4 (r) | 67.1 (r) | 72.8 (r) | 89.9 (r) | 78.5 | -19.7 | -12.7 | -12.6 | -0.3 |
| JB | Telecommunications | 487 | 89.9 | 90.2 | 88.8 (r) | 89.3 (r) | 87.8 (r) | 89.2 (r) | 94.5 (r) | 86.1 | 0.2 | 0.3 | -8.9 | -2.4 |
| JC | Information Technology & Other Information Activities | 407 | 95.9 | 96.5 | 99.4 | 87.9 | 84.1 (r) | 106.0 | 108.1 | 111.7 | 10.2 | -4.9 | 3.4 | 2.2 |
| K | Financial & Insurance Activities | 102 | 97.8 | 90.9 | 97.5 | 90.7 | 87.2 | 90.1 (r) | 95.6 (r) | 96.0 | -3.8 | -3.3 | 0.5 | 0.9 |
| L | Real Estate Activities | 265 | 98.1 | 96.1 | 95.5 (r) | 95.8 (r) | 95.5 (r) | 96.4 (r) | 96.5 (r) | 95.8 | -0.9 | -2.6 | -0.7 | 0.4 |
| LXOOD | Real Estate Activities excluding OOD | 153 | 106.7 | 100.2 | 99.8 (r) | 101.5 (r) | 95.6 (r) | 99.2 (r) | 104.3 (r) | 96.6 | -4.7 | -6.9 | -7.4 | 0.9 |
| OOD | Owner Occupied Dwellings | 849 | 96.9 | 95.5 | 95.0 (r) | 95.1 (r) | 95.5 (r) | 96.0 (r) | 95.5 (r) | 95.7 | -0.3 | -0.6 | 0.2 | 0.2 |
| M | Professional, Scientific & Technical Activities | 78 | 116.6 | 118.2 | 121.8 (r) | 126.8 (r) | 114.4 (r) | 115.6 (r) | 115.9 (r) | 129.1 | -1.1 | -7.2 | 11.3 | 0.7 |
| N | Administrative & Support Service Activities | 76 | 103.1 | 93.3 | 108.4 (r) | 95.5 (r) | 83.7 (r) | 91.9 (r) | 101.9 | 106.2 | -6.1 | -20.4 | 4.2 | 1.0 |
| RST | Other Services | 66 | 95.3 | 78.3 | 88.8 | 90.0 (r) | 60.3 (r) | 79.0 (r) | 83.8 (r) | 73.5 | -20.4 | -32.4 | -12.3 | -8.6 |

(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 30 June 2021.

(r) Revised figures.