Office for National Statistics

Statistical bulletin

Regional economic activity by gross domestic product, UK: 1998 to 2021

Annual estimates of economic activity by UK country, region and local area using gross domestic product (GDP). Estimates are available in current market prices and in chained volume measures and include a full industry breakdown of balanced regional gross value added (GVA(B)).

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1 . Main points

- In 2021, real gross domestic product (GDP) for the UK is estimated to have increased by 7.5%, following a decrease of 11.0% in 2020; all International Territorial Level (ITL) 1 regions reported negative growth in 2020 because of the widespread economic impact of the coronavirus (COVID-19) pandemic, followed by a partial recovery in 2021.

- Of the ITL1 regions, the North West experienced the largest increase in real GDP in 2021 at 9.9%; the smallest increase was seen in Scotland at 7.5%.

- Over the two years of the pandemic, Scotland and the North East of England were the most severely affected parts of the UK in real terms, both ending 2021 at 5.2% below their pre-pandemic levels; the East Midlands was the least badly affected region, ending 2021 at 2.2% below its 2019 level.

- At the ITL1 level, London had the highest GDP per head in current market prices at £59,855 in 2021, while the North East had the lowest GDP per head at £24,575.

- Of the ITL3 regions, Bedford showed the largest increase in real GDP in 2021 at 16.1%, while the smallest increase was registered in North Hampshire at 1.9%.

- Over the two years of the pandemic, Luton was the most severely affected ITL3 area of the UK in real terms, ending 2021 at 20.0% below its pre-pandemic level; Flintshire and Wrexham was the least badly affected area, ending 2021 at 7.4% above its 2019 level.

- At the ITL3 level, Camden and City of London had the highest GDP per head in current market prices at £582,584 in 2021, while Ards and North Down had the lowest GDP per head at £16,316; both extremes are highly affected by commuting flows.

2 . Gross domestic product by UK, country, and region

Summary

UK gross domestic product (GDP), in chained volume measures, was estimated to have decreased by 11.0% in 2020. This decrease was mainly the result of the coronavirus (COVID-19) pandemic, causing widespread business closures and restrictions on the mobility of consumers. Government interventions in the form of subsidies, to provide assistance to both businesses and consumers, have a negative impact on GDP.

In 2021, the UK economy recovered by 7.5% in chained volume measures, although the continuing impact of the coronavirus pandemic kept GDP below its pre-pandemic level.

Of the four countries in the UK, Scotland showed the largest decrease in real GDP in 2020 at negative 11.8% (Table 1), followed by the smallest recovery in 2021 at 7.5%. Wales saw the largest increase in real GDP of 9.1% between 2020 and 2021.

Table 1: Summary of gross domestic product statistics for selected countries and regions, 2021

	Population[3]	Total GDP (pounds million)	GDP per head (pounds)[1]	Annual growth in 'real' GDP 2020 (percentage)	Annual growth in 'real' GDP 2021 (percentage)
UK	67,026,307	2,276,715	33,745	-11.0	7.5
England	56,536,419	1,961,238	34,690	-11.5	8.9
North East	2,646,772	65,045	24,575	-13.3	9.4
North West	7,422,294	220,304	29,681	-12.0	9.9
Yorkshire and The Humber	5,481,431	151,794	27,692	-11.6	9.8
East Midlands	4,880,094	134,228	27,505	-10.6	9.4
West Midlands	5,954,240	164,631	27,649	-11.2	8.0
East of England	6,348,096	193,250	30,442	-12.6	9.6
London	8,796,628	526,524	59,855	-11.2	8.5
South East	9,294,023	336,201	36,174	-11.0	8.2
South West	5,712,840	169,261	29,628	-11.8	8.5
Wales	3,105,410	79,699	25,665	-11.5	9.1
Scotland	5,479,900	169,162	30,869	-11.8	7.5
Northern Ireland	1,904,578	51,717	27,154	-11.2	9.0
Extra-Regio	n/a	14,899	n/a	-5.7	-13.9

Source: Regional economic activity by gross domestic product, UK: 1998 to 2021 from Office for National Statistics

Notes:

1. Figures may not sum due to rounding in totals; per head (pounds) figures are rounded to the nearest pound.

2. 2021 data are provisional.

3. Population estimates are sourced from our Population Estimates for UK bulletin.

4. GDP in current market prices.

5. GDP in chained volume measures.

6. Per head figures exclude Extra-Regio as it comprises activity that cannot be assigned to regions.

7. n/a stands for not applicable.

At the International Territorial Level (ITL) 1, all countries and regions showed negative growth in real GDP between 2019 and 2020, followed by a partial recovery in 2021.

In 2020, the smallest decline in real GDP at ITL1 was reported in the East Midlands at negative 10.6%. In 2021, the East Midlands economy recovered by 9.4% in real terms, making it the region least badly affected by the coronavirus pandemic over this two-year period, ending only 2.2% below its pre-pandemic level.

In 2020, the largest decrease in real GDP at ITL1 was seen in the North East region of England at negative 13.3%. Although the North East saw a relatively strong recovery in 2021 at 9.4%, over the two years of the coronavirus pandemic it was the most severely affected region of England, ending 2021 at 5.2% below its pre-pandemic level. Only the economy of Scotland experienced the same impact over this combined period, also ending 2021 at 5.2% below its 2019 level.

The largest increase in real GDP in 2021 was seen in the North West of England at 9.9%, followed by Yorkshire and The Humber at 9.8%. The smallest increase in 2021 was seen in Scotland at 7.5%, followed by the West Midlands at 8.0%.

Figure 1: All ITL1 regions reported negative growth between 2019 and 2020, with a partial recovery in 2021

Notes:

1. GDP in chained volume measures.

2. This chart shows annual growth rates to one decimal place. There may be instances where growth in a region is showing no change to one decimal place. However, there may be movements in the underlying data.

Download the data

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Sector and industry analysis of gross value added (balanced)

As we do not have an industrial breakdown for regional GDP, we can use the gross value added (balanced) (GVA) estimates to understand the industry movements.

The impact of the coronavirus pandemic has not been felt equally across industry sectors, at either the UK or regional levels. Certain industries, such as accommodation and food service, arts and entertainment, recreation and personal services, as well as many non-essential retail outlets, were more affected by temporary closures. Restrictions on mobility resulted in vastly decreased use of transport services, particularly railways and air traffic.

Conversely, some industries have shown increased activity during the coronavirus pandemic, such as scientific research and development, and the manufacture of pharmaceutical products. At a subnational level, the distribution of these industries, whether they are growing or declining, is a major cause of variation between areas of the UK. It is important to bear this in mind when interpreting the regional results during this period.

Our GVA chained volume measures estimates show that the East Midlands was the ITL1 region with the smallest decrease in 2020 at negative 9.4%. The largest decline was seen in the North East at negative 12.3%. In 2021, the largest increase in real GVA was seen in the North West at 9.2%. The smallest increase was in Scotland at 6.7%.

At the UK level, the services sector declined by 12.4% in real terms between 2019 and 2020, followed by an increase of 7.4% in 2021. All ITL1 regions reported a decrease in this sector in 2020, followed by a partial recovery in 2021. During the two years of the coronavirus pandemic, Scotland experienced the greatest overall impact in services, ending 2021 at 8.2% below its pre-pandemic level. Although several other regions decreased by more in 2020, Scotland's relatively slow recovery in 2021 left it furthest below its 2019 level. London was the least affected region, decreasing by 10.7% in 2020, and ending 2021 at 3.9% below its 2019 level.

In 2020, the production sector increased by 1.0% in real terms at the UK level, followed by an increase of 7.5% in 2021. Growth in utilities (electricity, gas, water and waste) outweighed the poor performance in agriculture, mining and manufacturing industries. Of the ITL1 regions, only the West Midlands and North East saw a decrease in real GVA in the production industries in 2020, and all regions ended 2021 above their pre-coronavirus pandemic level.

At the UK level, the construction sector declined by 13.5% in real terms between 2019 and 2020, followed by an increase of 13.3% in 2021. All ITL1 regions reported negative growth in real GVA in 2020, followed by an increase in 2021. During the two years of the coronavirus pandemic, the North East experienced the greatest impact in construction, falling by 22.3% in 2020, and ending 2021 at 10.6% below its pre-pandemic level. The North West was the least affected region, decreasing by 10.0% in 2020, and ending 2021 at 3.7% above its 2019 level.

3 . Highest 10 and lowest 10 ITL3 areas

When ordered by gross domestic product (GDP) per head in current market prices, the highest 10 International Territorial Level (ITL) 3 areas in 2021 were in the London, South East, Scotland or North West ITL1 regions (Table 2). The top five areas were all within the London region. Milton Keynes is the highest area outside London, now sixth.

The lowest 10 ITL3 areas now cover 7 of the 12 ITL1 countries and regions, with only the North East, Yorkshire and The Humber, East Midlands, South East and Scotland not represented in 2021.

In real terms, all of the 179 ITL3 areas witnessed a decrease in GDP between 2019 and 2020. The largest decreases were in Luton (negative 27.8%), Harrow and Hillingdon (negative 24.3%), and Southampton (negative 21.9%); areas including major airports and a seaport. The smallest decreases were in Camden and City of London (negative 3.6%), Flintshire and Wrexham (negative 5.4%), and Telford and Wrekin (negative 5.5%).

All 179 ITL3 areas also saw increases in real GDP in 2021. The largest increases were in Bedford (16.1%), Torbay (14.8%), and Wolverhampton (14.7%). The smallest increases were in North Hampshire (1.9%), Sandwell (3.9%), Sunderland (4.0%), and Ards and North Down (4.0%).

By the end of 2021, 15 of the 179 ITL3 areas had recovered to the extent that their real GDP exceeded its pre-coronavirus (COVID-19) pandemic level. The areas with the highest growth since 2019 were Flintshire and Wrexham (7.4%), Camden and City of London (4.4%), East Derbyshire (2.1%), and Mid Lancashire (2.0%).

The ITL3 areas where real GDP remained furthest below its 2019 level at the end of 2021 were Luton (negative 20.0%), Southampton (negative 16.5%), Harrow and Hillingdon (negative 14.3%), and Blackpool (negative 13.8%).

While GDP per head can be a useful way of comparing regions of different size, comparisons can be affected by commuting flows into or out of the region. Therefore, our figures should be used with caution. For such areas, it is advisable to refer to our sub-regional productivity in the UK articles for a direct measure of economic performance.

Table 2: Highest 10 and lowest 10 ITL3 areas by gross domestic product (GDP) per head, 2021

	GDP per head (pounds)² ³	Population	Total GDP (pounds million)²	Annual growth in 'real' GDP 2020 (percentage)	Annual growth in 'real' GDP 2021 (percentage)
United Kingdom	33,745	67,026,307	2,276,715	-11.0	7.5
Highest 10 GDP per head					
Camden and City of London	582,584	219,008	127,591	-3.6	8.3
Westminster	382,206	205,087	78,385	-11.7	6.4
Tower Hamlets	128,919	312,273	40,258	-8.0	7.3
Kensington & Chelsea and Hammersmith & Fulham	69,908	327,235	22,876	-16.7	5.1
Haringey and Islington	55,921	480,897	26,892	-10.6	10.0
Milton Keynes	55,388	288,201	15,963	-12.2	10.8
Berkshire	53,850	950,588	51,189	-6.9	6.5
City of Edinburgh	51,776	526,470	27,258	-12.7	8.4
Hounslow and Richmond upon Thames	51,623	483,172	24,943	-19.0	12.1
Manchester	51,330	549,853	28,224	-12.9	12.2
Lowest 10 GDP per head					
Gwent Valleys	20,018	335,451	6,715	-11.5	10.4
Dudley	19,675	323,581	6,366	-13.0	10.1
Walsall	19,638	284,306	5,583	-14.2	10.9
Causeway Coast and Glens	19,539	141,664	2,768	-11.7	6.7
Sefton	19,418	279,692	5,431	-13.0	11.7
Southend-on-Sea	19,337	180,601	3,492	-19.2	10.9
Redbridge and Waltham Forest	18,933	587,886	11,130	-17.7	13.3
Isle of Anglesey	18,102	68,944	1,248	-19.7	8.5
Torbay	17,846	139,446	2,489	-18.3	14.8
Ards and North Down	16,316	163,827	2,673	-11.1	4.0

Source: Regional economic activity by gross domestic product, UK: 1998 to 2021 from Office for National Statistics

Notes:

1. Data for all ITL3 local areas are included in our Regional gross domestic product: all ITL regions dataset.

2. GDP at current market prices on workplace basis.

3. Figures may not sum due to rounding in totals; per head (pounds) figures are rounded to the nearest pound sterling.

4. 2021 data are provisional.

5. Per head figures exclude Extra-Regio as it comprises activity that cannot be assigned to regions.

6. Population estimates are sourced from our Population Estimates for UK bulletin.

7. GDP in chained volume measures.

4 . Gross domestic product per head for UK local authorities, 1998 to 2021

Figure 2 allows users to explore how gross domestic product per head in current market prices has varied among local authorities between 1998 and 2021.

Figure 2: Gross domestic product per head for UK local authorities, 1998 to 2021

Notes:

1. The City of London is not shown on the map because its GDP per head is a large outlier value.

2. Natural breaks have been used to classify the data into ranges.

Download the data

.xlsx

5 . Regional economic activity data

Regional gross domestic product: all ITL regions
Dataset | Released 25 April 2023
Annual estimates of balanced UK regional gross domestic product (GDP). Current price estimates and chained volume measures for UK countries, ITL1, ITL2 and ITL3 regions.

Regional gross domestic product: city regions
Dataset | Released 25 April 2023
Annual estimates of balanced UK regional gross domestic product (GDP). Current price estimates and chained volume measures for combined authorities and city regions.

Regional gross domestic product: enterprise regions
Dataset | Released 25 April 2023
Annual estimates of balanced UK regional gross domestic product (GDP). Current price estimates and chained volume measures for local enterprise partnership areas and other economic and enterprise regions.

Regional gross domestic product: local authorities
Dataset | Released 25 April 2023
Annual estimates of balanced UK regional gross domestic product (GDP). Current price estimates and chained volume measures for local authority districts, London boroughs, unitary authorities and Scottish Council areas.

Regional gross value added (balanced) by industry: all ITL regions
Dataset | Released 25 April 2023
Annual estimates of balanced UK regional gross value added (GVA(B)). Current price estimates, chained volume measures and implied deflators for UK countries, ITL1, ITL2 and ITL3 regions, with a detailed industry breakdown.

6 . Glossary

Chained volume measures (CVM)

These time series have the effects of inflation removed by considering changes in quantity between consecutive periods, holding prices from previous periods constant.

Constant price (KP) series

These series have the effects of inflation removed by holding prices throughout the series at the level in a chosen base year (also known as "real terms" series).

Current price (CP) series

These series include the effects of inflation.

GDP

Gross domestic product (GDP) measures the value of goods and services produced in the UK. It estimates the size of and growth in the economy.

Gross value added (GVA)

The value generated by any unit engaged in production and the contributions of individual sectors or industries to gross domestic product.

ITL

International Territorial Levels (ITL) is the new UK geographies classification system. This has superseded the Nomenclature of Units for Territorial Statistics (NUTS) classification system.

7 . Measuring the data

Methodology information

Various guidance and methodology publications relating to regional gross value added: balanced (GVA(B)), income (GVA(I)) and production (GVA(P)) are available. Our Regional accounts methodology guide: June 2019 provides an overview of the methodology used to compile regional accounts outputs.

More quality and methodology information on strengths, limitations, appropriate uses, and how the data were created is available in the Regional gross value added (balanced) QMI.

Other historical guidance, methodology and update documents are also available in Section 7: Measuring the data of our Regional economic activity by gross domestic product, UK: 1998 to 2018 bulletin.

Revisions

Gross regional product (GDP) and GVA estimates show revisions for the period 1998 to 2020.

All estimates, by definition, are subject to statistical error. However, in this context the word refers to the uncertainty in any process or calculation that uses sampling, estimation or modelling. Most revisions reflect either the adoption of new statistical techniques or the incorporation of new information, which allows the statistical error of previous estimates to be reduced.

This year we have made changes to the methodology for education services in the non-market sector. In previous publications, education output on the GVA(P) side of the accounts was apportioned regionally using data on the size of the public sector education workforce and their earnings. The revised approach included in this publication more closely mirrors the approach used in the national accounts by measuring the output of non-market education using activity data on the number of pupils educated in each phase of state-funded schools, weighted by their cost.

This approach is explained in our Measuring subnational education output article. Several further refinements have been made to improve these estimates since this article was released and prior to their inclusion in regional GDP, including to the data sources selected and the calculation of cost-weights for special schools, pre-primary schooling and academies.

We have also improved the measurement of public administration and defence to better reflect the distribution of armed forces personnel across the UK. Although the services provided by this sector are mostly for the benefit of everyone in the UK, we allocate the GVA of this activity according to the locations where public sector workers are based.

As mentioned in last year's bulletin, this year we have a more complete allocation of the various government subsidies that were introduced to help people and businesses cope during the coronavirus (COVID-19) pandemic. This has resulted in additional revisions, as we have been able to replace some modelled data with better quality estimates.

We have published revisions triangles for GVA:

- Revisions triangles: regional gross value added (balanced) in current basic prices
- Revisions triangles: regional gross value added (balanced) in chained volume measures

8 . Strengths and limitations

National Statistics

Data included in this release are designated as National Statistics, which means they have been assessed by the Office for Statistics Regulation as fully compliant with the Code of Practice for Statistics.

Quality information

Figures for 2021 are provisional as national estimates have not been through supply and use balancing at the time of this publication. Regional industry estimates for the components of income and production in 2021 have been calculated by applying growth in gross domestic product (output) industry figures, and then constraining these to sum to the income and production component totals. The figures used in this process are consistent with those published in the UK National Accounts, The Blue Book: 2022.

This year Census 2021 in England and Wales has provided us with new estimates of the population of areas in 2021, but we do not yet have rebased estimates for the intercensal years 2012 to 2020. As a result, there is a discontinuity in the population estimates between 2020 and 2021. We have therefore suppressed any annual growth estimates of gross domestic product (GDP) per head for 2020 to 2021 from this publication. We strongly advise users not to calculate and use these distorted growth rates themselves, but instead to look at annual growth in real GDP to compare the performance of areas over time.

More information regarding the quality of these estimates can be found in the Regional gross value added (balanced) QMI.

9 . Related links

GDP, UK regions and countries: April to June 2022
Bulletin | Released 9 February 2023
Quarterly economic activity within the countries of the UK (England, Wales, Scotland and Northern Ireland) and the nine English regions (North East, North West, Yorkshire and The Humber, East Midlands, West Midlands, East of England, London, South East, and South West).

Regional gross disposable household income, UK: 1997 to 2020
Bulletin | Released 13 October 2022
Annual estimates of regional gross disposable household income (GDHI) for the UK International Territorial Level (ITL) ITL1, ITL2, ITL3 regions, local and combined authorities, city regions and other economic and enterprise regions.

Country and regional public sector finances, UK: financial year ending 2021
Article | Released 27 May 2022
Public sector revenue, expenditure and net fiscal balance on a country and regional basis.

Subregional productivity in the UK: July 2022
Article | Released 6 July 2022
Estimates for subregional labour productivity measured as gross value added (GVA) per hour worked and GVA per filled job.

10 . Cite this statistical bulletin

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