

ECONOMY AND LABOUR MARKET

GDP Quarterly National Accounts, Scotland

2021 Quarter 4 (October-December)

4 May 2022

This publication includes an updated estimate of onshore GDP growth in real terms for the fourth quarter of 2021, along with additional breakdowns of GDP by categories of income and expenditure, and key household sector economic statistics, which are used for economic forecasting and modelling.

Key results

- In 2021 Quarter 4 (October to December), Scotland's onshore GDP is estimated to have grown by 1.6% compared to the previous quarter, revised up from the previous estimate of 1.3% published on 16 March.
- This release contains estimates that are consistent with the annual Supply and Use Tables for 1998-2018 for the first time. As such, results for all periods back to 1998 are subject to revision. Further detail on these changes is available in the Revisions section.
- In quarterly terms, the level of GDP is unrevised at 1.1% below the level in 2019 Quarter 4 (Oct-Dec), prior to the impacts of the coronavirus (COVID-19) pandemic.
- In output terms, the largest contribution to growth in Quarter 4 was from health and social work, mostly driven by a large increase in coronavirus vaccination, test and tracing activities towards the end of the year. Overall, services sector output increased by 1.7%, production sector output increased by 1.0%, and construction sector output increased by 2.8%.
- Annual GDP is now estimated to have grown by 7.4% in 2021, after a fall of 10.6% in 2020.

Information About This Release

The coronavirus pandemic has led to a number of challenges in collecting and processing the data to calculate GDP. As a result, estimates from 2020 onwards are subject to more uncertainty than usual and may be more prone to revision over time. International comparisons, and comparisons within the UK, should be made with appropriate caution for the levels of uncertainty and variations in methods in use by different statistical institutes around the world.

Since the start of the COVID-19 pandemic, the Scottish Government has developed faster monthly estimates of GDP growth. The [latest estimates are for February 2022](#). The next release, incorporating monthly GDP for March 2022 and the First Estimate for 2022 Quarter 1 will be published on 1 June.

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About the GDP Quarterly National Accounts

This publication includes the second estimate of onshore GDP growth for 2021 Quarter 4 (October to December), which uses additional data released since the Quarterly GDP First Estimate published on 16 March 2022. The results in this release are comparable to the UK Quarterly National Accounts for Quarter 4 published on 31 March 2022.

The results in this release are consistent with the annual Supply and Use Tables for 1998-2018, and volume estimates of GDP have been calculated using double-deflated industry-level gross value added (GVA) for the first time. As such, results for all periods back to 1998 are subject to revision. Further detail on these changes is available in the Revisions section.

In addition to the second estimate of onshore growth in real terms, the GDP Quarterly National Accounts also includes:

- Total GDP in nominal (cash) terms for the onshore economy and also the wider economy including offshore activities
- Onshore GDP in nominal terms broken down using all three of the output, expenditure and income approaches
- Experimental statistics estimates of the expenditure approach to GDP in real terms
- Household Sector income and expenditure accounts for Scotland, including Gross Disposable Household Income (GDHI) and the Household Savings Ratio
- Public sector revenues.

Data

This publication includes a short summary of key results from the latest statistics.

Full results for all components are available in the following downloadable tables:

1. Onshore GDP by industry in real terms, second estimate (xlsx)
2. Other Quarterly National Accounts Summary Tables (xlsx)
3. Detailed Supplementary Tables (xlsx)
4. Revisions to annual GVA by industry 1998-2018 (xlsx)

Second quarterly estimate of onshore GDP growth for 2021 Quarter 4

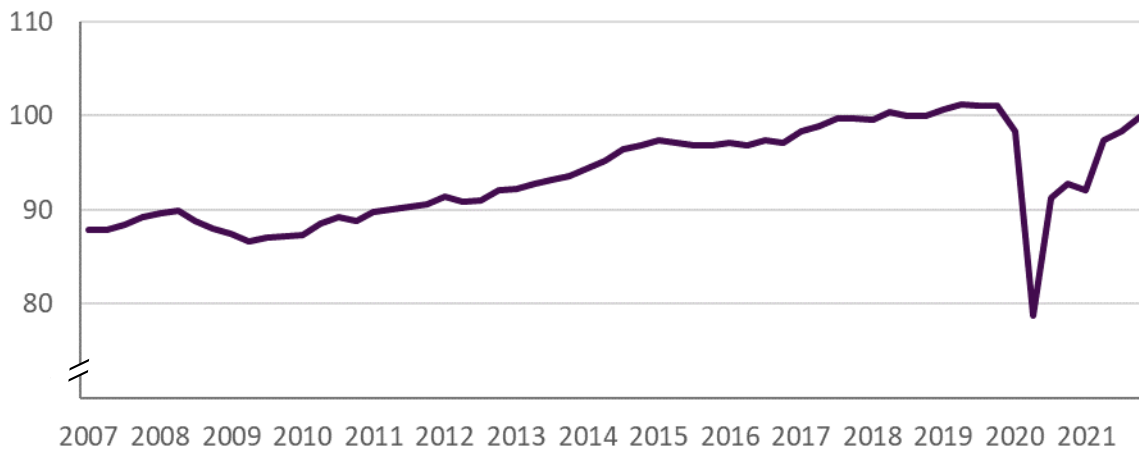
Scotland’s onshore GDP (i.e. excluding offshore oil and gas) is estimated to have grown by 1.6% in real terms during 2021 Quarter 4 (October to December), revised up from the previous estimate of 1.3% published in March.

Compared to the same quarter last year, Scotland’s GDP has grown by 7.7%. This strong increase reflects the ongoing recovery from the low base level in 2020, after GDP fell by 22% between 2019 Q4 and 2020 Q2.

In quarterly terms, the level of GDP is now 1.1% below the level in 2019 Quarter 4 (Oct-Dec), prior to the impacts of the coronavirus (COVID-19) pandemic. This is unrevised from the previous estimate of 1.1% below that level at the end of 2020.

Annual GDP is now estimated to have grown by 7.4% in 2021, after a fall of 10.6% in 2020.

GDP volume measure, Scotland onshore (2018=100)



In output terms, the largest contribution to growth in Quarter 4 was from health and social work, mostly driven by a large increase in coronavirus vaccination, test and tracing activities towards the end of the year. Overall, services sector output increased by 1.7%, production sector output increased by 1.0%, and construction sector output increased by 2.8%.

The [Monthly GDP](#) estimates (which are experimental statistics) give a more detailed indication of the trends for each industry sector, and include results up to February 2022.

Results from the [Business Insights and Conditions Survey \(BICS\)](#) for Scotland are also being published, covering aspects of trading status, workforce status and financial performance.

GDP in nominal terms

In 2021 as a whole, annual onshore GDP is estimated to have been £167.6 billion in total, or £30,639 per person. This has increased from the much lower value of £153.4 billion estimated for 2020, and is now back above the pre-pandemic value of 2019.

In terms of the income approach to GDP, the largest part of the fall in nominal GDP in 2020 is accounted for by a decline in the value of taxes less subsidies on products and production. This reflected both a decrease in tax revenue, such as VAT, and an increase in subsidies such as the Coronavirus Job Retention Scheme (CJRS) and Self Employment Income Support Scheme (SEISS). Gross Operating Surplus, which mostly represents company profits, has also fell strongly in 2020, but is estimated to have recovered close to pre-pandemic levels in 2021. Compensation of Employees (mostly wages and salaries) has increased over the last two years, supported in part by the increased subsidies, offsetting against the falls in other components.

Including oil and gas extraction in Scottish waters, Scotland's GDP in 2021 is estimated to be £182.1 billion in total, or £33,297 per person. This reflects a recovery in the oil price during 2021, relative to 2020, as well as in onshore economic activity.

Although GDP statistics in real terms are available for the onshore economy only, estimates of GDP in nominal terms are produced for both the onshore and wider economy including oil and gas extraction. These are widely used for international comparisons and fiscal analysis. A range of other statistics on oil and gas activity in Scottish waters is available at <https://www.gov.scot/collections/economy-statistics/>.

Additional measures of economic activity and wellbeing

GDP (or GDP per person) is the most widely known indicator of economic activity and is frequently used to make comparisons between places or over time. There are also a range of other measures which can be used to indicate different aspects of economic activity and wellbeing.

Within this publication, Gross Disposable Household Income (Page 5) is the most comprehensive direct measure of the money earned by people in Scotland, including income earned in other parts of the UK or abroad, and accounting for transfers such as pensions, taxes and benefits.

Gross National Income (GNI) is a measure which accounts for income flows between countries or territories for all sectors of the economy, such as outflows of profits generated by foreign owned companies. Experimental estimates of GNI, last updated for 2017, are available [here](#).

Labour productivity statistics, which report GDP per job or per hour worked are available [here](#). Productivity statistics releases have been temporarily paused while we focus on faster indicators of output and deal with the challenges of estimating GDP during the COVID-19 pandemic. The latest estimates are for 2019 Quarter 4, but estimates up to the end of 2021 are planned for release in the coming months.

Looking beyond GDP and the economy, Scotland's National Performance Framework (NPF) includes a range of economic, social and environmental indicators which give a wider indication of national wellbeing. Further information can be found at nationalperformance.gov.scot.

Gross Disposable Household Income (GDHI)

Gross Disposable Household Income (GDHI) is a measure of how much money the population has for spending or saving after earnings and transfers such as pensions, taxes and benefits are accounted for. GDHI includes income earned in other areas of the UK or from abroad (for example, offshore workers’ income or income from overseas investments) which are not part of onshore GDP.

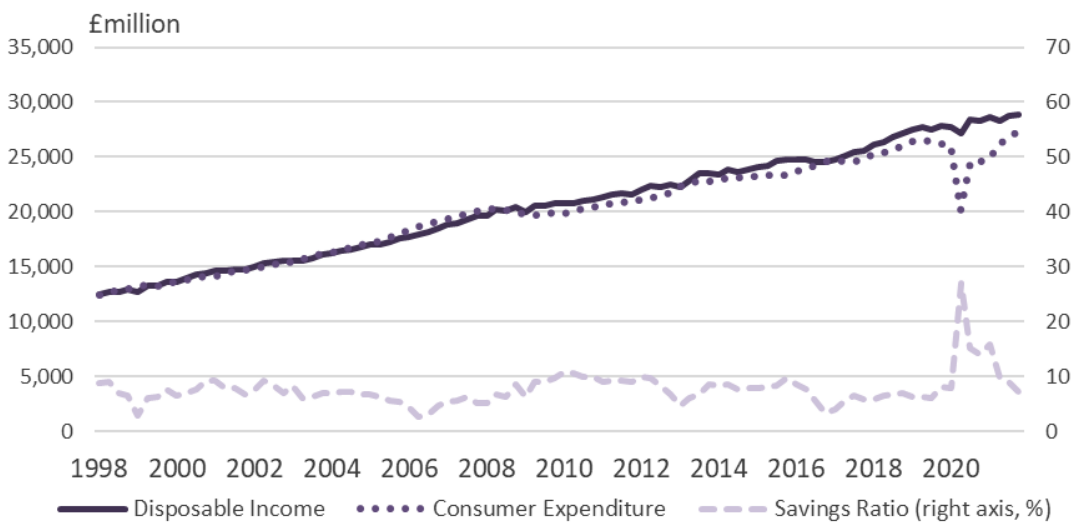
In 2021 Quarter 4, GDHI is estimated to have increased by 2.2% in nominal terms (without adjusting for inflation) over the year compared to 2020 Quarter 4. Compared to pre-pandemic levels, GDHI is 3.8% higher in nominal terms than in 2019 Quarter 4. The impact of the Coronavirus job retention scheme is one reason why the income of the household sector, as a whole, did not fall as much as GDP during the pandemic, although there is a clear difference between compensation of employees (up 7.2% compared to pre-pandemic levels) and self-employed mixed income (down 3.2% compared to pre-pandemic levels).

Household Savings Ratio

In National Accounts, gross saving is calculated by subtracting household sector consumer expenditure from disposable income. This broadly represents funds which are available for adding to savings or paying off debt, although it also includes large values of non-cash transactions such as the imputed rent of owner-occupiers within both the income and expenditure components. It is not a measure of actual deposits made to savings accounts, or of savings accounts balances, but is a useful indicator of trends in overall household finances, and has been strongly impacted during the coronavirus pandemic.

In 2021 Quarter 4, household savings ratio in Scotland is estimated at 7.2 per cent of total income resources, which is down sharply from the peak of 27.0 per cent in 2020 Quarter 2 when expenditure was curtailed during the first lockdown. The savings ratio is now back to a similar level seen in the years prior to the coronavirus pandemic.

Household sector income, expenditure and saving



Revisions

This release contains estimates that are now consistent with the [annual Supply and Use Tables for 1998-2018](#). As such, results for all periods back to 1998 are subject to revision. This also includes routine updates to the short term data for recent periods, including to the latest quarter, since the First Estimate published on 16 March.

In addition to the usual update of annual reference levels and weights for GDP and its components, volume estimates of GDP during the balanced years 1998-2018 have been calculated using double-deflated industry-level gross value added (GVA) for the first time. This follows similar developments in the UK National Accounts Blue Book 2021, first published in the [UK Quarterly National Accounts for 2021 Quarter 2](#) on 30 September 2021.

The introduction of double deflation marks a significant improvement towards international best practice for volume GDP methodology, and improves the comparability of GVA and GDP estimates between Scotland and the UK as a whole. A spreadsheet has been published alongside this publication showing the scale of revisions to annual volume GVA for each industry in Scotland and the UK as a whole.

For double deflation, annual volume GVA for all industries is estimated directly from the balanced supply and use tables by separately deflating the output and intermediate consumption of each industry using prices for each of the products produced and consumed. The quarterly volume measures are then constrained to the annual double deflated GVA series. Along with the introduction of the double deflation methodology, other updates have been introduced to the pre-2018 time period which improve comparability with the UK statistics. This includes improved deflators for imputed rental, and updated UK telecoms deflators introduced by ONS in 2021.

These changes have resulted in some notable revisions to annual growth rates for Scotland between 1998-2018. These are more significant for Scotland than was seen for the UK as a whole because overall volume GDP is determined solely by the production approach (industry GVA) in Scotland, whereas for the UK this is balanced against the expenditure approach which is usually seen as more reliable.

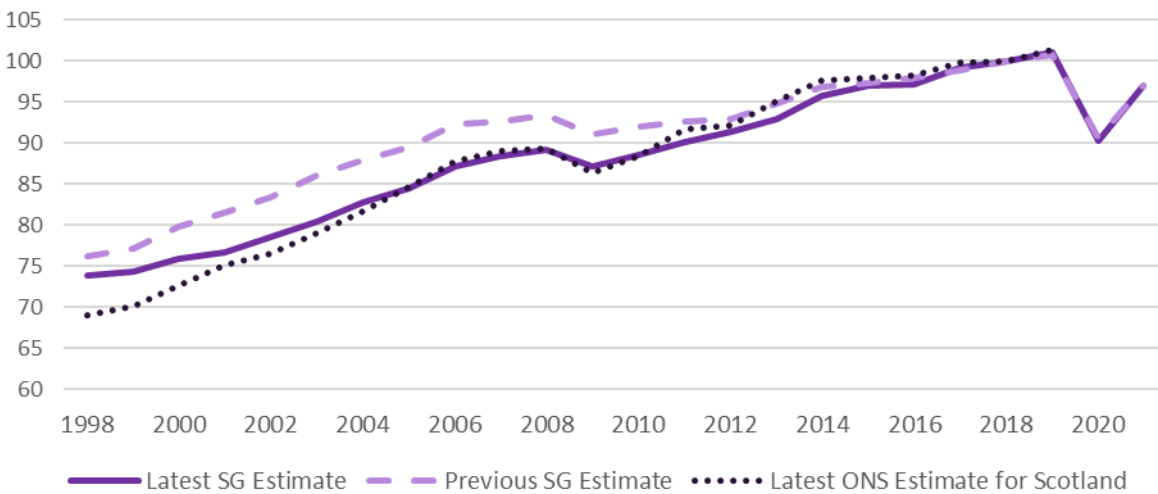
Over the decade before the financial crisis, between 1998-2008, average annual growth has been revised down slightly from 2.0% per year to 1.9% per year. Over the following decade from 2008-2018, average annual growth has been revised up from 0.7% per year to 1.2% per year. Taken over the entire period from 1998-2018, average annual growth has been revised up from 1.4% to 1.5%.

Revisions to annual GDP growth rates, 1999-2018



Although these updates have led to upward revisions for Scotland, the estimates are still below the average annual growth rate of 1.9% estimated by the ONS for Scotland in [Regional Economic Activity by Gross Domestic Product](#) due to the different approaches taken for measurement of the output of some industries, including non-market output. However, despite differences in year to year movements, average growth is now very similar between the two series from 2005 onwards.

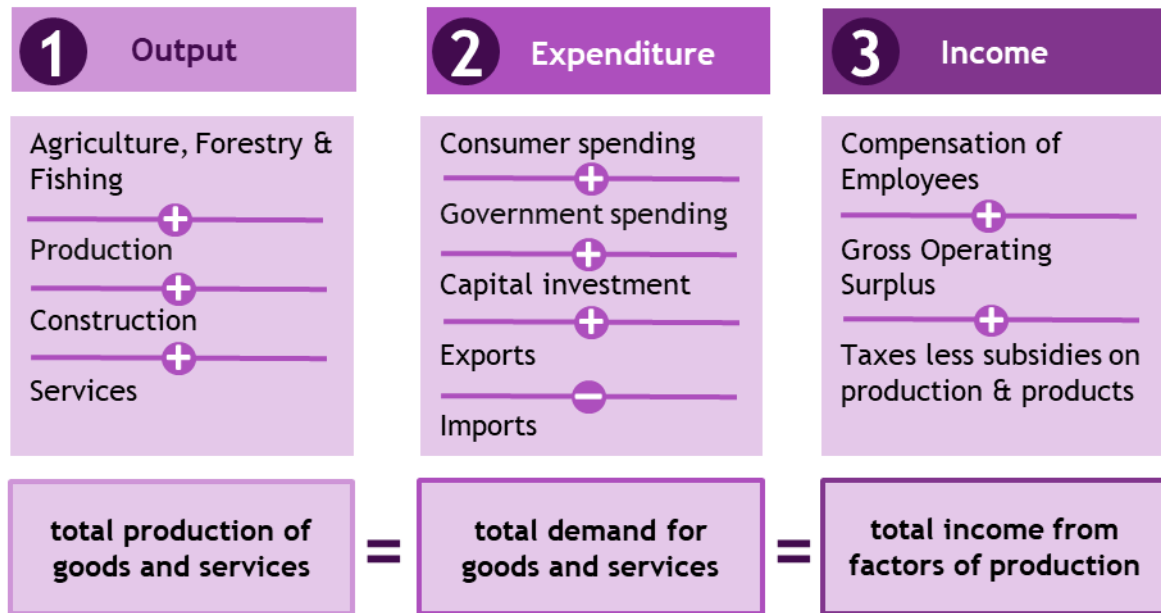
Revision to GDP volume series and comparison to ONS Regional GDP (2018=100)



In quarterly terms, revisions to individual periods have also been larger than seen for the UK as a whole when double deflation was introduced. This reflects the impact of the larger revisions to annual growth rates, to which the quarterly estimates are constrained. Over the period from 1998-2018, the mean absolute revision (scale of revision regardless of direction) to quarterly growth is plus or minus 0.3 percentage points. The mean revision (including the direction of change) is +0.04%, indicating the upward revision to average growth over this period. The scale of these changes reflects the one-off impact of making a significant change to methodology.

About the GDP Quarterly National Accounts

Gross domestic product (GDP) is the main indicator of economic activity in Scotland. There are three ways to measure GDP which should all produce the same result. Each of these approaches allows GDP to be broken down into different categories.



The GDP Quarterly National Accounts covers all three approaches to GDP and their breakdowns in **current prices** (cash terms, unadjusted for inflation) for the onshore economy. Estimates of onshore GDP in **real terms** are available using the output approach, and are now also available for the expenditure approach as experimental statistics.

The GDP Quarterly National Accounts also includes estimates of total GDP in current prices for the wider Scottish economy including an illustrative share of UK extra-regio (offshore and overseas) economic activity.

Development Plan

The Scottish Fiscal Commission publishes an annual Statement of Data Needs ([link](#)). These outline the data the SFC requires for its forecasts and highlights priorities for new or improved data. Information on the plans relating to these priorities is available [here](#).

Next publications

| | |
|---|--------------|
| GDP Monthly Estimate (experimental statistics), March 2022 | 1 June 2022 |
| GDP First Quarterly Estimate (national statistics), 2022 Quarter 1 | 1 June 2022 |
| GDP Quarterly National Accounts (national statistics), 2022 Quarter 1 | 27 July 2022 |

A National Statistics publication for Scotland

Quarterly National Accounts for Scotland was assessed by the Office for Statistics Regulation (OSR) and designated as National Statistics in January 2014, signifying compliance with the Code of Practice for Statistics. Assessment Report 272 can be found at <https://www.statisticsauthority.gov.uk/publication/quarterly-national-accounts-scotland/>.

Designation can be interpreted to mean that the statistics: meet identified user needs; are produced, managed and disseminated to high standards; and are explained well.

Since the assessment there has been a programme of continuous improvement to the Quarterly National Accounts, including to the data used for capital investment and household earnings, and improved communication of the results. Some developments are ongoing and are clearly identified as experimental statistics in the release.

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Complaints and suggestions

If you are not satisfied with our service or have any comments or suggestions, please write to the Chief Statistician, St Andrew's House, Edinburgh, EH1 3DG, Telephone: (0131) 244 0302, e-mail statistics.enquiries@gov.scot.

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