GDP Quarterly National Accounts, Scotland
2022 Quarter 3 (July to September)

1 February 2023

This publication includes updated estimates of onshore GDP growth in real terms up to the third quarter of 2022, 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 2022 Quarter 3, Scotland’s onshore GDP is estimated to have fallen by 0.1% compared to the previous quarter. This result is revised up from the first estimate for the quarter of a 0.2% fall published on 30 November.

- In the latest quarter, output grew by 0.1% overall in the Services sector, and fell by 1.0% in the production sector and fell by 1.0% in the construction sector.

- All estimates in this release have been updated to be consistent with the latest annual Supply and Use Tables for 1998-2019. As such, results for all periods back to 1998 are subject to revision. Further information is available in the Revisions section.

- Annual GDP is now estimated to have grown by 8.4% in 2021, after falling by 12.2% in 2020.

- Compared to the same quarter in 2021, income from employment is estimated to have increased by 5.9%. After accounting for other income, interest payments, taxes and social contributions, total gross disposable income is up by 4.3%. Over the same period, total consumer expenditure is estimated to have increased by 8.1%, driven by high price inflation. These movements have seen the household savings ratio fall back over the last year from the high levels estimated during the coronavirus pandemic, and indicates a tightening in household finances.

Information About This Release

The coronavirus pandemic led to a number of challenges in collecting and processing the data to calculate GDP. As a result, estimates for 2020 and 2021, in particular, 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.
Second quarterly estimate of onshore GDP growth for 2022 Quarter 3

Scotland’s onshore GDP (i.e. excluding offshore oil and gas) is estimated to have fallen by 0.1% during 2022 Quarter 3 (July to September), revised up from the first estimate for the quarter of a 0.2% fall published in November. The fall in the latest quarter follows unrevised flat output (0.0% growth) during Quarter 2 (April to June).

Compared to the same quarter last year, Scotland’s GDP has grown by 2.8%, revised down from the first estimate of 2.9%. This relatively high rate of growth over the year continues to reflect the recovery from the lower levels of output seen during periods of restrictions during the coronavirus pandemic in 2020 and 2021.

Revised estimates of annual GDP growth show that Scotland’s onshore economy contracted by less than in the previous publication, with a fall of 12.2% in 2020, followed by growth of 8.4% in 2021. The upward revisions mostly reflect a faster recovery in the estimated output of the construction sector after the share of UK workforce jobs in Scotland was revised up by the ONS.

In quarterly terms, following the revisions noted above, the level of GDP is now 0.4% below the level in 2019 Quarter 4, prior to the impacts of the coronavirus (COVID-19) pandemic, after an initial fall of 24.5% between 2019 Quarter 4 and 2020 Quarter 2.

GDP change compared to previous quarter, Scotland

In 2022 Quarter 3, output in the services sector increased by 0.1% overall compared to the previous quarter, with growth in eight of the fourteen subsectors.

Output in the production sector fell by 1.0%, including a fall of 0.8% in manufacturing output.

Output in the construction sector fell by 1.0%.

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 November 2022 at the time of release.
**GDP in nominal terms**

In 2021 as a whole, annual onshore GDP is estimated to have been £168.7 billion in total, or £30,793 per person. This has increased from the much lower value of £153.6 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, during the early phase of the pandemic, 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, 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 £181.0 billion in total, or £33,033 per person. This reflects a recovery in the oil price during 2021, relative to 2020, as well as the increased 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/](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 4) 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 for Scotland, last updated for 2017, are available [here](https://www.gov.scot/collections/economy-statistics/), and are planned to be updated during 2023.

Labour productivity statistics, which report GDP per job or per hour worked are available [here](https://www.gov.scot/collections/economy-statistics/). The latest estimates are for 2021.

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](https://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 2022 Quarter 3, GDHI is estimated to have increased by 4.3% in nominal terms (without adjusting for inflation) over the year compared to 2021 Quarter 3. The largest part of GDHI is income from employment, which is up by 5.9% over the year. However, consumer expenditure has increased by 8.1% over the year, reflecting high levels of inflation.

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 2022 Quarter 3, the household savings ratio in Scotland is estimated at 8.8 per cent of total income resources, which is down sharply from the peak of 29.1 per cent in 2020 Quarter 2 when expenditure was curtailed during the first lockdown. The savings ratio is now at a similar level to that seen before the COVID-19 pandemic.
Revisions

This release contains estimates that are now consistent with the annual Supply and Use Tables for 1998-2019 and the ONS Regional Gross Disposable Household Income for 1998-2020. As such, results for all periods back to 1998 are subject to revision.

As part of this update, annual reference levels and weights for GDP and its components have been moved forward to 2019, and volume estimates of GDP during the balanced years 1998-2019 have been calculated using double-deflated industry-level gross value added (GVA).

In annual terms, revisions in the years 1998-2019 reflect the reference levels in the supply and use tables, with total GVA being closely constrained to the latest ONS Regional Economic Activity release. This has seen the level of GVA and GDP revised up in most years, and the income and expenditure components re-balanced and revised in turn. In the years 2020-onwards, revisions mostly reflect the reweighting of short term indicators to match the latest reference levels in 2019, along with routine data updates in the most recent quarters. The most significant change seen in the last few years is due to an upward revision to the Scottish share of UK workforce jobs in construction, which results in a faster recovery in estimated construction activity after 2020.

Annual GDP change has been revised up slightly in the last two years, and is now estimated to have grown by 8.4% in 2021, after falling by 12.2% in 2020.

In 2022 so far, growth in 2022 Quarter 3 is revised up to -0.1% from the first estimate of -0.2%. The main sources of this revision are updated data inputs for parts of the production sector, along with an upward revision to the share of UK construction jobs in Scotland. Quarter 2 is unrevised at 0.0% and Quarter 1 is revised down to 0.7% compared to the previous quarter. Further details can be found in GDP Table R1.1.

Information on the publication model for Scotland’s GDP, including the revisions policy and the routine data updates between the first estimate and quarterly national accounts, can be found at https://www.gov.scot/publications/gdp-background-documents/.

About the GDP Quarterly National Accounts

This publication includes the second estimate of onshore GDP growth for 2022 Quarter 3 (July to September), which uses additional data released since the Quarterly GDP First Estimate published on 30 November 2022. The results in this release are comparable to the UK Quarterly National Accounts for Quarter 3 published on 22 December 2022.

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.
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.

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<thead>
<tr>
<th>Output</th>
<th>Expenditure</th>
<th>Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture, Forestry &amp; Fishing</td>
<td>Consumer spending + Government spending + Capital investment + Exports - Imports</td>
<td>Compensation of Employees + Gross Operating Surplus + Taxes less subsidies on production &amp; products</td>
</tr>
<tr>
<td>Production</td>
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<tr>
<td>Construction</td>
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<tr>
<td>Services</td>
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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), December 2022  
  1 March 2023
- GDP First Quarterly Estimate (national statistics), 2022 Quarter 4  
  1 March 2023
- GDP Quarterly National Accounts (national statistics), 2022 Quarter 4  
  26 April 2023
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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