Office for National Statistics

Article

Public service productivity: total, UK, 2021

Updated annual measures of output, inputs and productivity for UK public services between 1997 and 2021: service area breakdown, quality adjustment, latest revisions.

Contact:
Public Service Productivity Review team
psp.review@ons.gov.uk
+44 3456 013034

Release date:
26 March 2024

Next release:
To be announced

Table of contents

1 . Main points

- Annual quality-adjusted UK public service productivity increased by 6.5% in 2021, following a fall of 14.5% in 2020, reflecting a larger increase in output than in inputs, but not returning to pre-coronavirus (COVID-19) pandemic levels.

- Total quality-adjusted output increased by 10.4% in 2021, while non-quality-adjusted output increased by 11.4%; quality-adjusted measures grew at a slower rate for healthcare and education.

- Healthcare and education were the main contributors to the increase in productivity (contributing 4.5 percentage points and 2.0 percentage points, respectively), while public order and safety made a small negative contribution (reducing productivity by 0.1 percentage points) in 2021.

- Total inputs grew by 3.7% in 2021, a slower pace than in 2020 when additional resourcing was required to respond to the coronavirus pandemic.

2 . Public service productivity development

These estimates show the relationship between public service inputs and output. As in our previous publications on total public service productivity, it shows detailed information on the growth of inputs and output in different service areas, the impact of quality adjustment, and the latest revisions.

This is the second annual report published by the Office for National Statistics (ONS) on total public service productivity in the UK where the findings are affected by the coronavirus (COVID-19) pandemic. As reported in our previous Public service productivity: total, UK, 2020 article, the pandemic caused widespread cost pressures and disruption across public service outputs with specific effects on the data because of fundamental changes in the delivery of services. Because of changes to some data sources and methods, estimates for some public service areas are less directly comparable with previous annual estimates and so caution should be used when comparing the latest estimates with those for years prior to the pandemic.

This article presents the first wave of improvements to the annual productivity measure for the whole public sector since the beginning of our Public Services Productivity Review. Changes reflect improvements to measures of quantity output, quality adjustment and inputs, as described in our Improved methods for total public service productivity methodology article published on 8 March 2024.

We, at the ONS, will continue to develop and improve our methods across the UK nations. Specifically, we are working with government departments and the devolved administrations to expand coverage of UK public services. We will focus both on improving quantity output, quality adjustment, and inputs for service areas that are measured directly, and on moving from an indirect to direct approach whenever this is possible. As an example, police and immigration, defence, and "other" government services use the "output-equals-inputs" convention where productivity growth is zero by definition.

For the service areas that are directly measured (that is, outputs are measured using activity data) it is not possible to measure all the activities they do, but we are continually looking to capture a wider breadth of activity.

If methods change and more data become available in the future, these estimates will be revised. For more information, please see our Revisions policy for economic statistics.

These estimates differ from those published in November 2023 in our Public service productivity, UK: 1997 to 2022 article, which presented new experimental measures for the path of annual UK public service productivity in 2021 and 2022 using a nowcast approach. This article includes Accredited official statistics derived from the most up-to-date and comprehensive annual data and provides our most robust estimate of public service productivity. The experimental nowcast measures published in November 2023 continue to be under methodological review and subject to improvement and revision.

Finally, these estimates are not labour productivity metrics and are not directly comparable to labour productivity or multi-factor estimates for the whole economy, also published by the ONS. These data instead reflect the volume of services delivered to users relative to the volume of total inputs, which include labour, intermediate consumption, and capital. More details for each component of productivity are presented in Section 13: Data sources and quality.

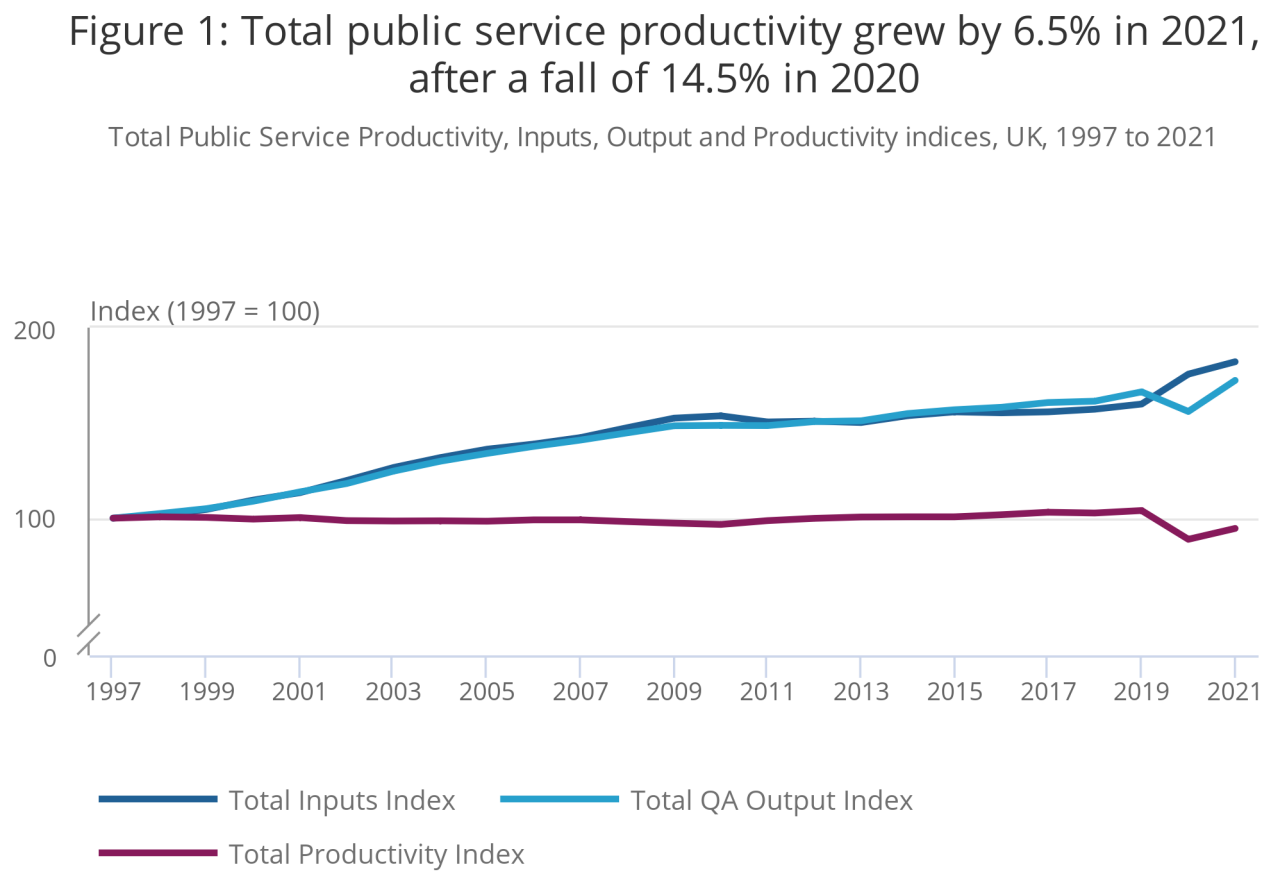
3 . Overview of public service productivity

This article includes updated annual estimates of quality-adjusted (QA) (which is a more complete measure) and non-quality-adjusted (NQA) output, inputs, and productivity for nine public service areas in the UK from 1997 to 2021. The statistics have been prepared on a calendar-year basis.

In 2021 inputs into public services grew by 3.7%, and QA output grew by 10.4% compared with the previous year. This results in a growth rate of 6.5% for quality-adjusted public service productivity in 2021, following a drop of 14.5% in 2020. NQA output grew by 11.4% in 2021, leading to non-quality-adjusted public service productivity growing by 7.4% in 2021.

Figure 1: Total public service productivity grew by 6.5% in 2021, after a fall of 14.5% in 2020

Total Public Service Productivity, Inputs, Output and Productivity indices, UK, 1997 to 2021



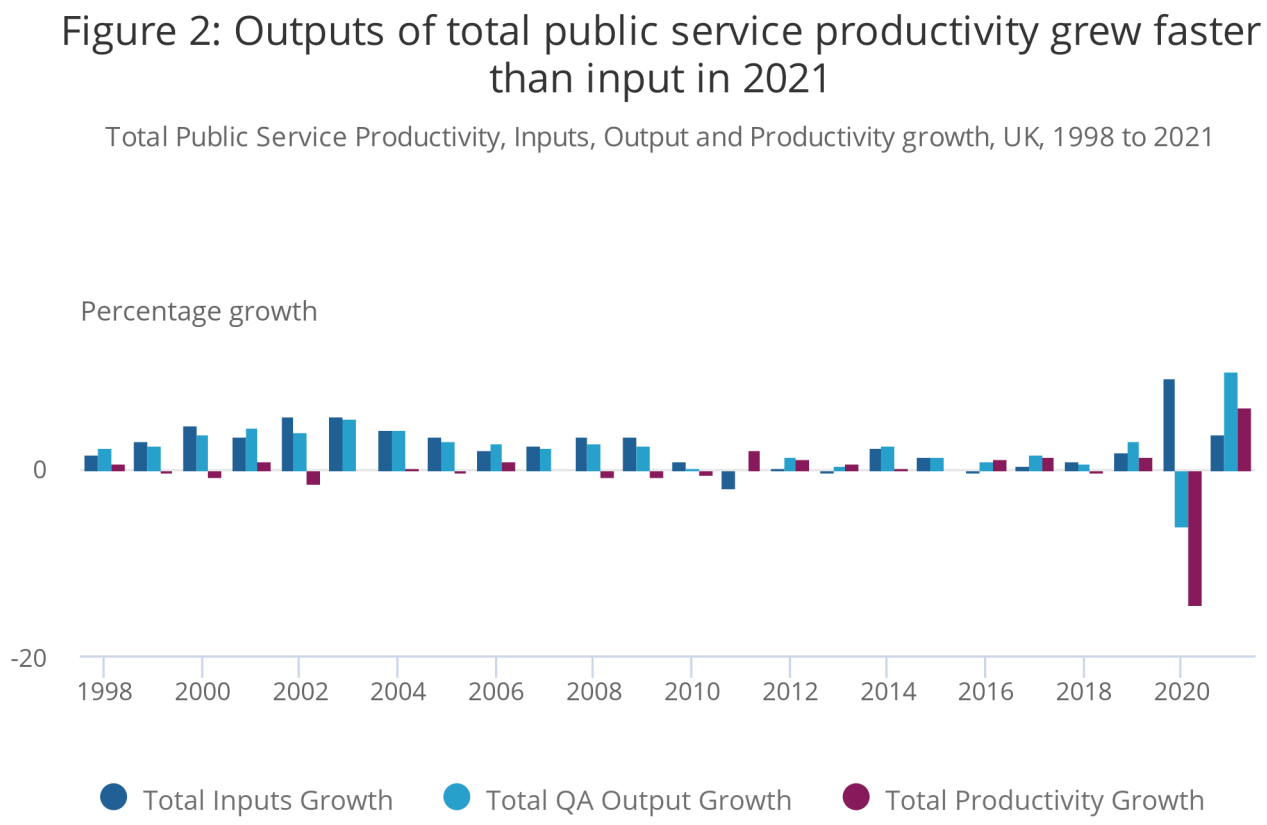
Source: Public service productivity from the Office for National Statistics

Although public service productivity in 2021 showed indications of recovery from the record drop of 14.5% in 2020, it did not return to pre-pandemic levels. Following the highest recorded increase in inputs in 2020 (by 9.8%), growth in inputs in 2021 was still higher than those typically observed in the series, indicating that substantial resources were required to support public service bounce-back in 2021.

QA and NQA output, respectively, showed clearer signs of recovery in 2021, following record drops of 6.2% and 6.4% in 2020, and surpassed pre-coronavirus (COVID-19) pandemic levels. This could indicate that public services were able to demonstrate some adaptation to the challenges of the pandemic. However, inputs growth in 2021 dampened the recovery of public service productivity, which has not yet reached its pre-pandemic peak.

Figure 2: Outputs of total public service productivity grew faster than input in 2021

Total Public Service Productivity, Inputs, Output and Productivity growth, UK, 1998 to 2021



Source: Public service productivity from the Office for National Statistics

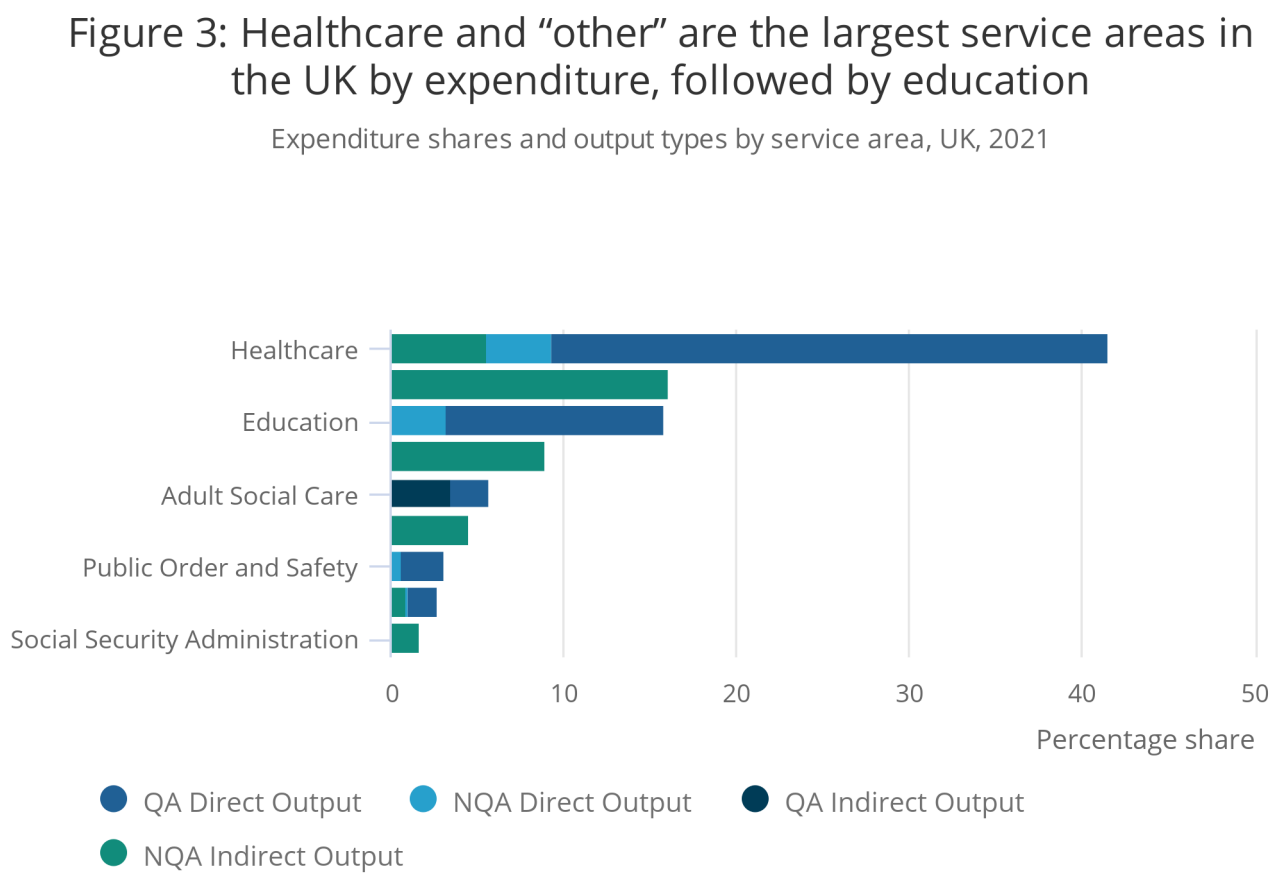
Total public service output and inputs are calculated by aggregating output and inputs of the nine service areas based on their expenditure shares, as outlined in our Sources and methods for public service productivity estimates methodology article. A higher expenditure share equates to that service area having a heavier contribution towards the estimation of the statistics. The three largest expenditure shares in 2021 were:

- healthcare (41.5%)
- "other" government services (16.1%), which comprises general government services, economic affairs, environmental protection, housing, recreation, and other public order and safety (these are not currently subject to direct output measurement or quality adjustment)
- education (15.7%)

As part of the Public Service Productivity Review, we are working to disaggregate the category "other" government services into categories that better represent specific public services, and where possible to introduce direct output measurement and to consider quality adjustment.

Figure 3: Healthcare and “other” are the largest service areas in the UK by expenditure, followed by education

Expenditure shares and output types by service area, UK, 2021



Source: Public service productivity from the Office for National Statistics

Notes:

1. Percentage share of components may not sum to 100 or service area totals because of rounding.

2. QA means quality-adjusted. NQA means non-quality-adjusted.

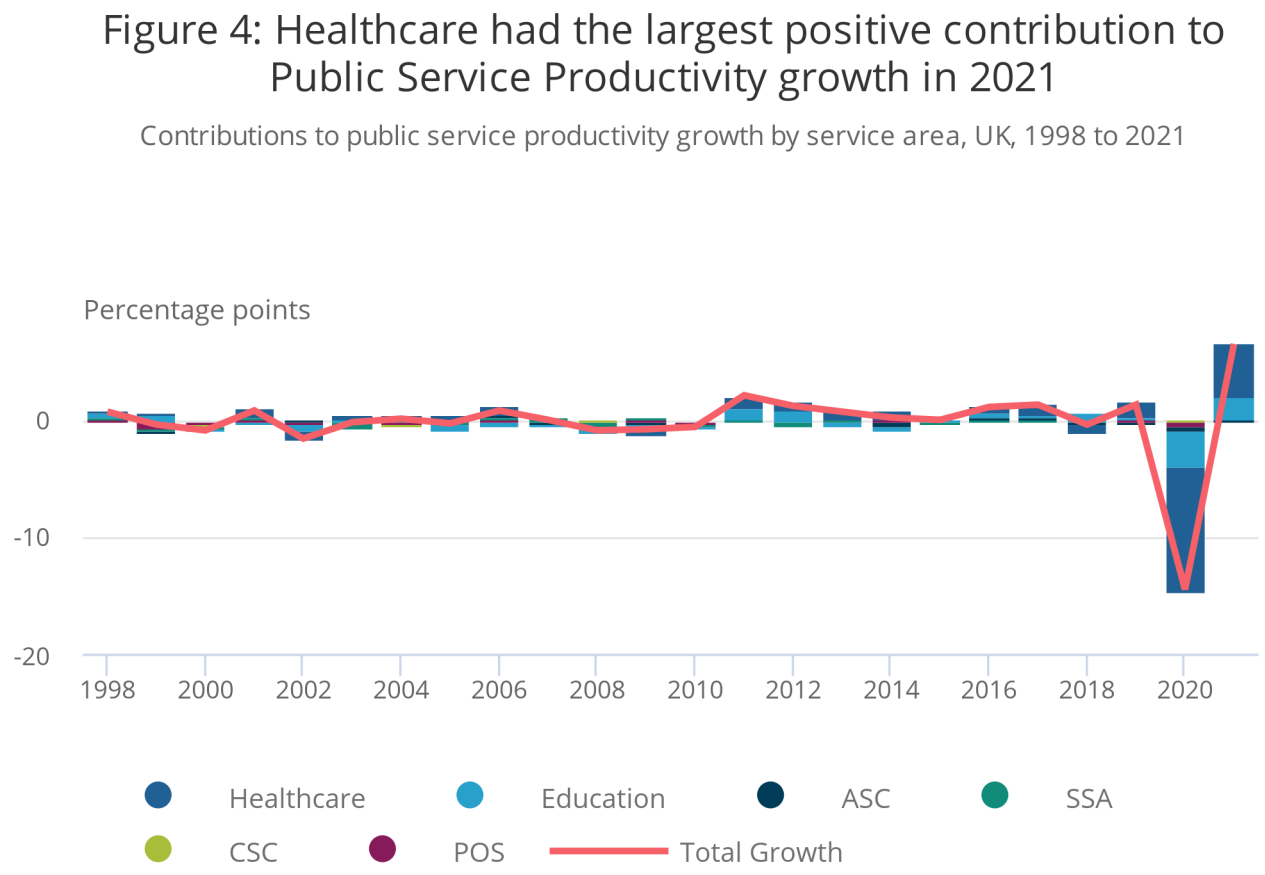
3. "Direct" means output is measured using activity indicators (for example, enrolment figures in schools, or number of GP consultations). "Indirect" means output is measured following the "output-equals-inputs" convention.

Figure 4 reflects the contributions of directly measured service areas towards productivity growth, which are weighted by their relative expenditure shares. Healthcare had the largest positive contribution towards productivity growth in 2021 (plus 4.5 percentage points), followed by education (plus 2.0 percentage points). Public order and safety had the largest negative contribution towards productivity growth in 2021 (negative 0.1 percentage points).

Police and immigration, defence, and "other" government services are not included in the contributions as they are measured using the "output-equals-inputs" convention, therefore productivity growth in these sectors is zero by definition. Since 2018, social security administration (SSA) is also not included in the contributions as this service area has applied the "output-equals-inputs" convention.

Figure 4: Healthcare had the largest positive contribution to Public Service Productivity growth in 2021

Contributions to public service productivity growth by service area, UK, 1998 to 2021



Source: Public service productivity from the Office for National Statistics

Notes:

1. Growth of components may not sum to overall growth because of rounding.

2. The contribution to growth for each component depends on both its growth rate and its weight in total output.

3. ASC means "Adult social care", SSA "Social security administration", CSC "Children's social care", POS "Public order and safety".

4. SSA is excluded from 2018 as it reverted to the "inputs-equal-outputs" method.

4 . Healthcare

Healthcare represents the largest service area included in public service productivity estimates by expenditure share (around 41.5% of total public service provision).

Public service healthcare productivity increased by 10.8% in 2021, a partial bounce-back from a record fall of 25.1% in 2020. This growth reflects a substantial increase in output of 15.7%, offset partially by a growth in inputs of 4.3%.

Quantity output growth is mainly a result of increases in the volume of services that were negatively affected during the coronavirus (COVID-19) pandemic in 2020, such as elective treatment and outpatient consultations being delayed or cancelled, coupled with an increase in COVID-19-related services during 2021, including the vaccine rollout and the mass asymptomatic testing programme.

Healthcare inputs increased by a further 4.3% in 2021, on top of a record growth of 24.1% in 2020, as additional expenditure of operational procurement in response to the coronavirus pandemic continued throughout the calendar year. This includes volume growth for items such as goods and services associated with the operation of NHS Test and Trace, and COVID-19 vaccine consumption, which joined this index from 2020 onwards.

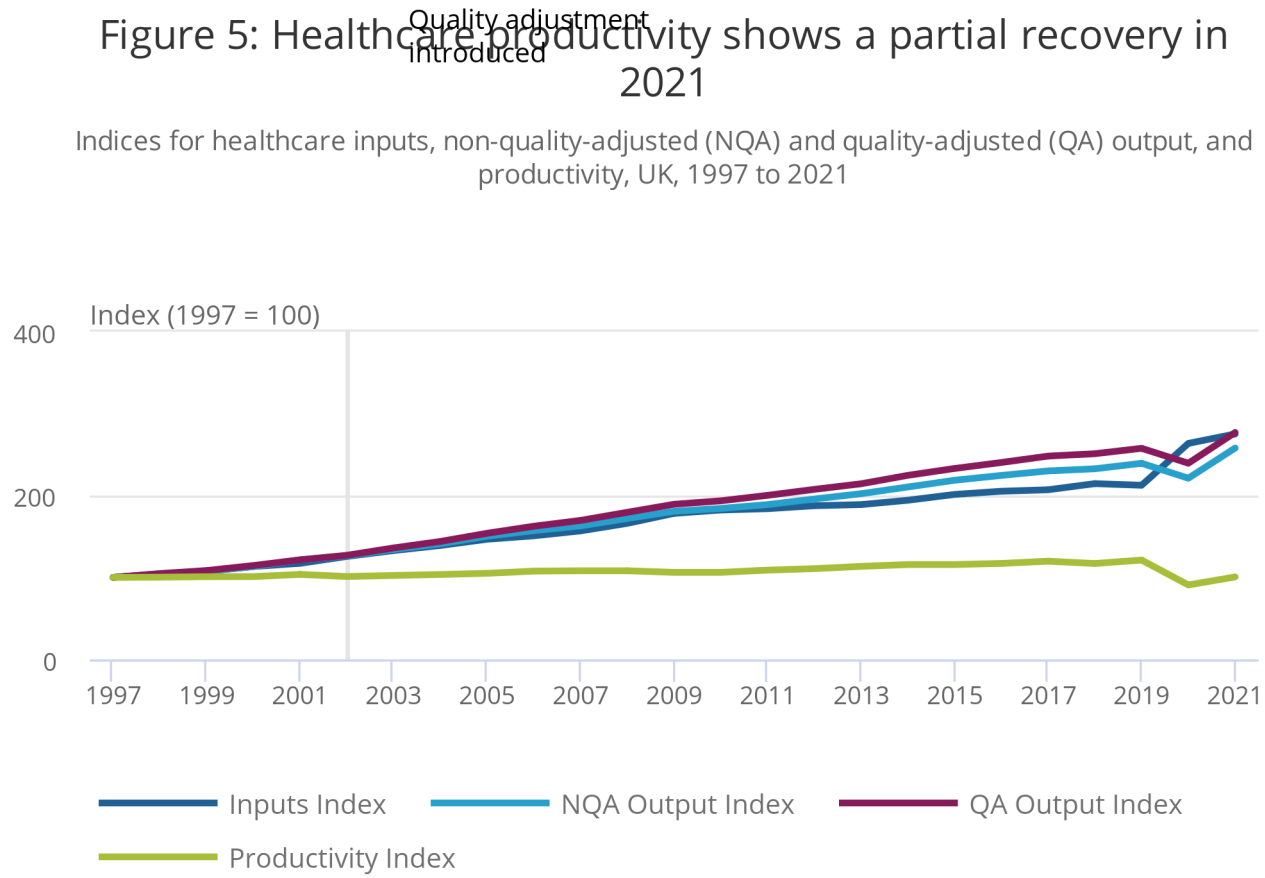
If comparing these data with our recently published Public service productivity, healthcare, England: financial year ending 2022 article, we advise you to use caution because while this article contains data on a calendar-year basis and covers the UK, the standalone healthcare data are on a financial-year basis and cover only England. As such, the differences in growth rates can be explained both by differences in the patterns of inputs and output growth across calendar relative to financial years, and the relevant trends in the different parts of the UK.

In the calendar-year estimates, a "cubic splining" process has been used to generate a calendar-year trend from financial-year data. More information, and an explanation of splining, can be found in Section 13: Data sources and quality. It is crucial to note that the differences between calendar-year and financial-year estimates are most impactful around the COVID-19 pandemic, when the effect of this on healthcare services can be revealed either in calendar year 2020 or financial year 2020 to 2021.

In November 2023, we also published experimental nowcast estimates of 2021 in our Public service productivity, UK: 1997 to 2022 article, which was informed by historical data. At that time, given qualitative evidence on the specific nature of the impact on the health services in this period from the pandemic, we decided to manually intervene into our nowcast of health productivity to reduce the modelled rate of growth. The out-turn data presented here suggest this approach was correct but greater caution could have been applied at that time. As these experimental data nowcasts are improved, this information will be taken into account to improve the methods.

Figure 5: Healthcare productivity shows a partial recovery in 2021

Indices for healthcare inputs, non-quality-adjusted (NQA) and quality-adjusted (QA) output, and productivity, UK, 1997 to 2021



Source: Public service productivity from the Office for National Statistics

5 . Education

Education is the third largest service area in public service productivity by expenditure share, and the second largest of those with direct measurements in 2021.

UK education services productivity rose by 13.1% in 2021 on a quality-adjusted basis, following an 18.9% decline in 2020. The main contribution to this rise was a growth in output of 10.9% and a decline in inputs of 1.9%. Education's 2021 productivity index has recovered by around half since the fall in 2020 but has not returned to the pre-coronavirus (COVID-19) pandemic levels seen in 2019.

Excluding quality adjustments, education services productivity rose by 16.1% in 2021, reflecting a rise in non-quality-adjusted output growth of 13.9%.

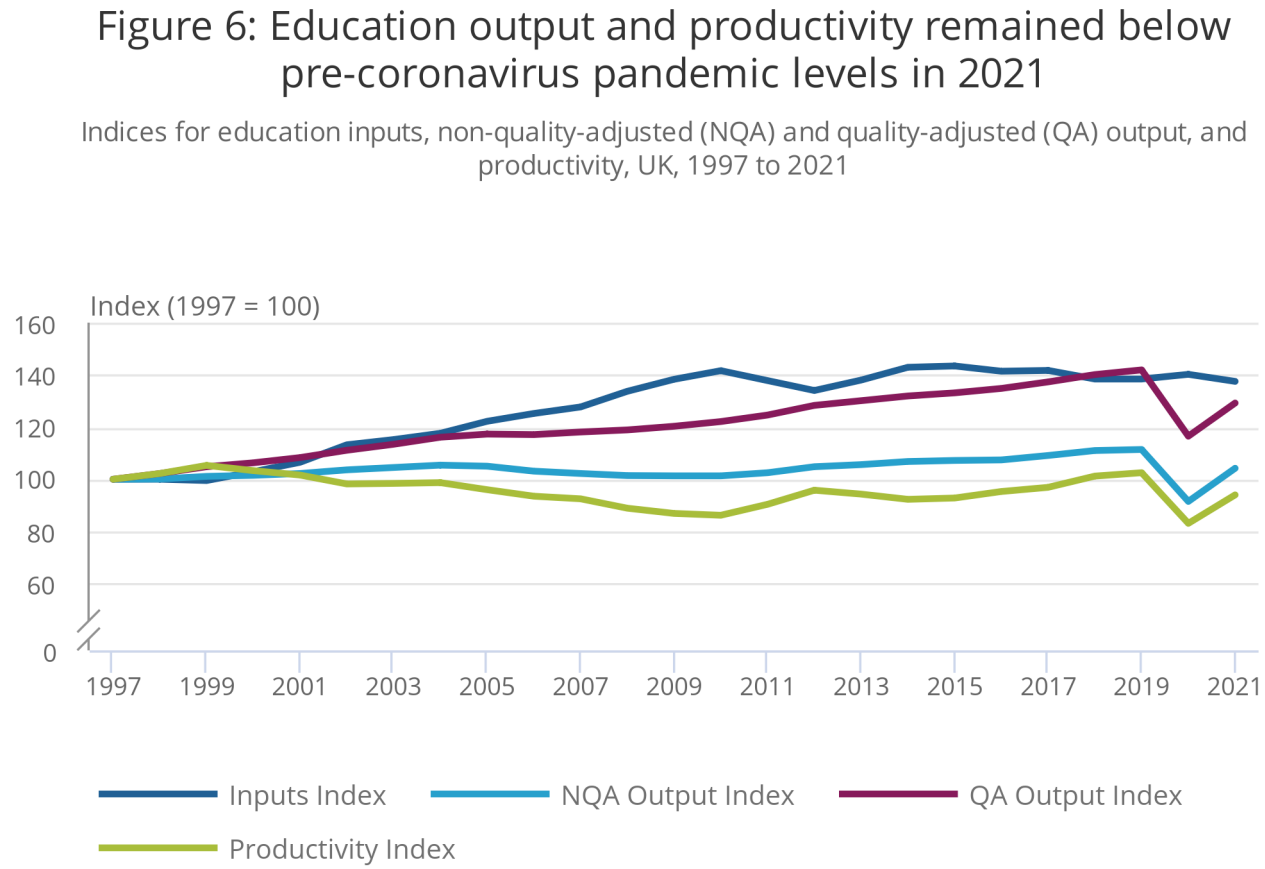
The increase in quantity output in 2021 was largely because of a bounce-back in in-person attendance and teaching, and improved remote learning resources, compared with 2020.

Quality-adjusted output grew at a slower rate than quantity output because of a fall in attainment levels. Our approach for incorporating attainment measures into these estimates is summarised in Section 13: Data sources and quality.

This area has benefited from a number of data and methods improvements, which we have implemented through the first year of the Public Services Productivity Review (as explained in our Improved methods for total public service productivity methodology), including a better methodology to account for academy schools. These create small changes to the historical data, as well as providing more accurate data in the coronavirus pandemic period, which suggest the downturn was less substantial than initial estimates. This revision replaces data on learning loss with data from the National Reference Test, which provides a longer time series and a better conceptual match to the adjustment being applied.

Figure 6: Education output and productivity remained below pre-coronavirus pandemic levels in 2021

Indices for education inputs, non-quality-adjusted (NQA) and quality-adjusted (QA) output, and productivity, UK, 1997 to 2021



Source: Public service productivity from the Office for National Statistics

6 . Adult social care

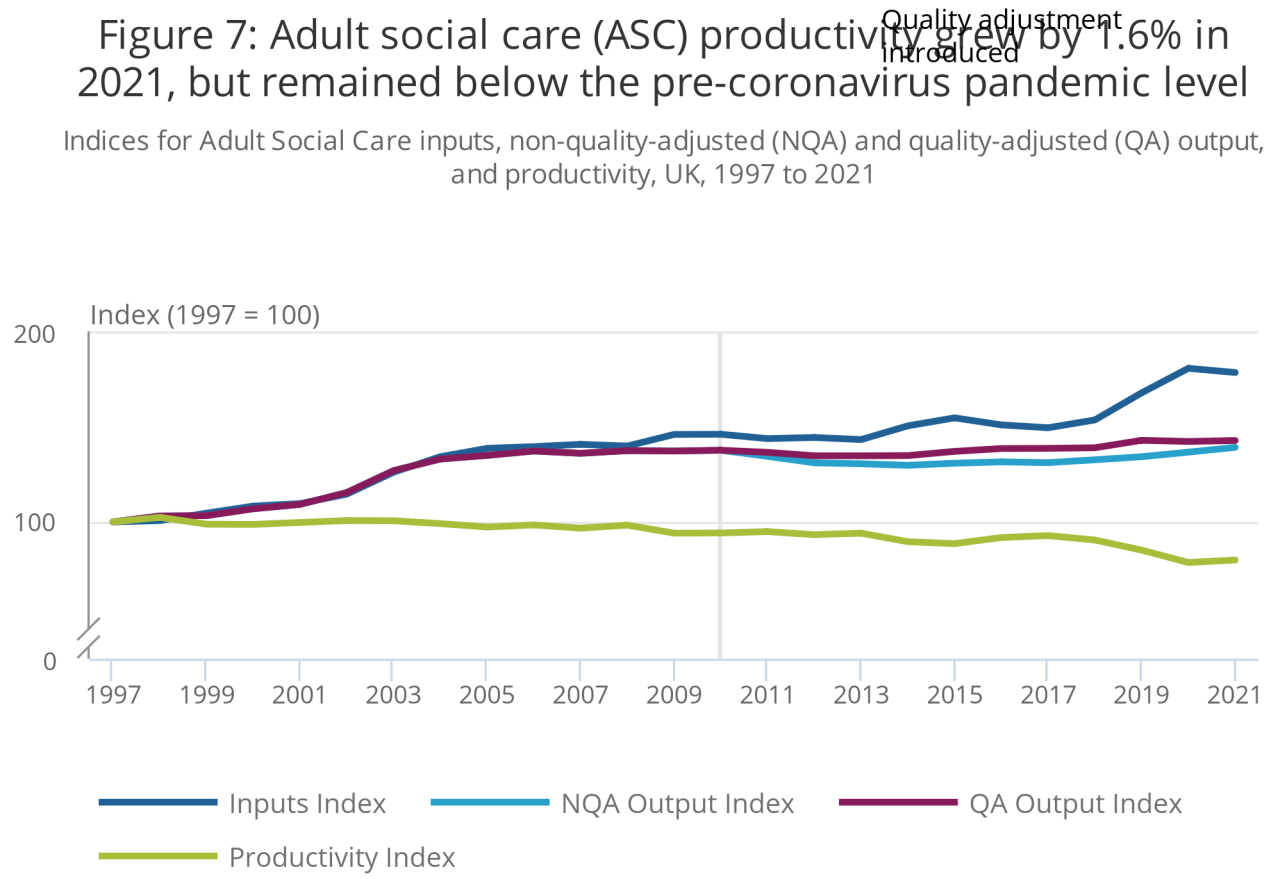
Adult social care (ASC) relates to care and support provided to older people, adults with learning or physical disabilities, adults with mental health problems, drug and alcohol misusers, and carers.

ASC quality-adjusted productivity grew by 1.6% in 2021, while non-quality-adjusted productivity grew by 3.1%. The application of quality measures reduced quality-adjusted output growth to 0.3%, from a non-quality-adjusted output growth level of 1.8%. This was primarily the result of reductions in client care-related quality of life in community care settings. Total ASC inputs fell by 1.2% in 2021, following growth of 7.7% in 2020.

From 2014, directly measured output for England was only available for residential and nursing care, with other services measured indirectly following the "output-equals-inputs" convention.

Figure 7: Adult social care (ASC) productivity grew by 1.6% in 2021, but remained below the pre-coronavirus pandemic level

Indices for Adult Social Care inputs, non-quality-adjusted (NQA) and quality-adjusted (QA) output, and productivity, UK, 1997 to 2021



Source: Public service productivity from the Office for National Statistics

Previously, we published public service ASC productivity for England on a financial-year basis in our Public service productivity, adult social care, England article. However, they cover only England, as opposed to the whole UK, and use different data sources for input expenditure. More information on ASC in England will be published in the future.

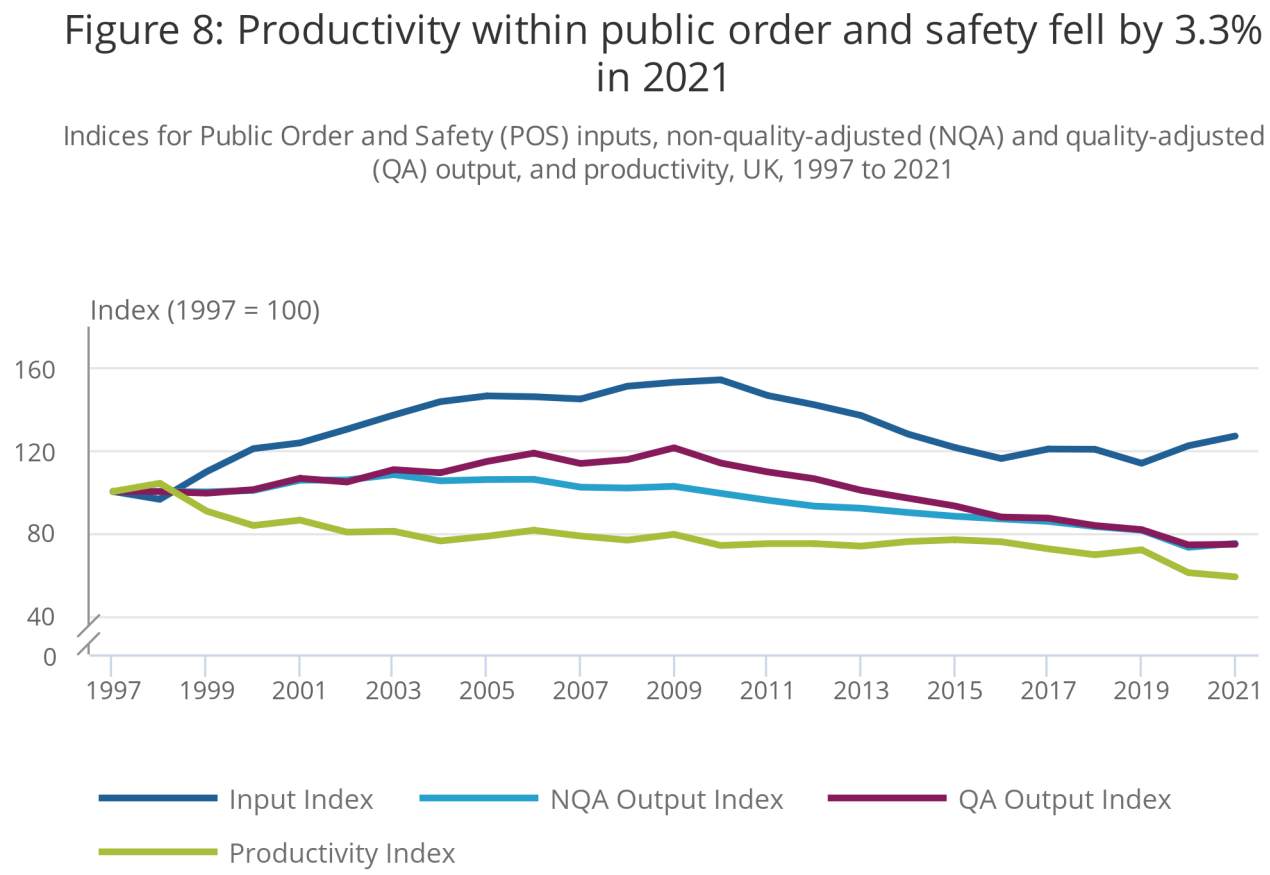
7 . Public order and safety (excluding police and immigration services)

Public order and safety (POS) (excluding police and immigration services) incorporates a range of services including courts, prisons, probation and fire, as shown in our Public service productivity estimates methodology. POS quality-adjusted productivity fell by 3.3% in 2021. This was influenced by a growth in inputs of 3.9%, exceeding growth in quality-adjusted output of 0.5%. Goods and services expenditure, specifically of courts, was the primary contributor to inputs growth in 2021. Operational costs associated with the functioning of courts during the coronavirus (COVID-19) pandemic are likely to have increased expenditure on goods and services.

POS non-quality-adjusted output grew by 2.6% in 2021, following a 10.3% decline in 2020. The application of quality measures reduced quality-adjusted output growth to 0.5% in 2021. This was primarily a result of a worsening in courts' timeliness during, and after, the pandemic period.

Figure 8: Productivity within public order and safety fell by 3.3% in 2021

Indices for Public Order and Safety (POS) inputs, non-quality-adjusted (NQA) and quality-adjusted (QA) output, and productivity, UK, 1997 to 2021



Source: Public service productivity from the Office for National Statistics

8 . Children's social care

Children's social care covers a broad range of services for children, including the provision of social work, personal care, protection or social support services to children in need or at risk. The current CSC output measures include looked-after children (LAC), children in need, Sure Start schemes, adoption and other activities. See our Sources and methods for public service productivity estimates methodology article for full details.

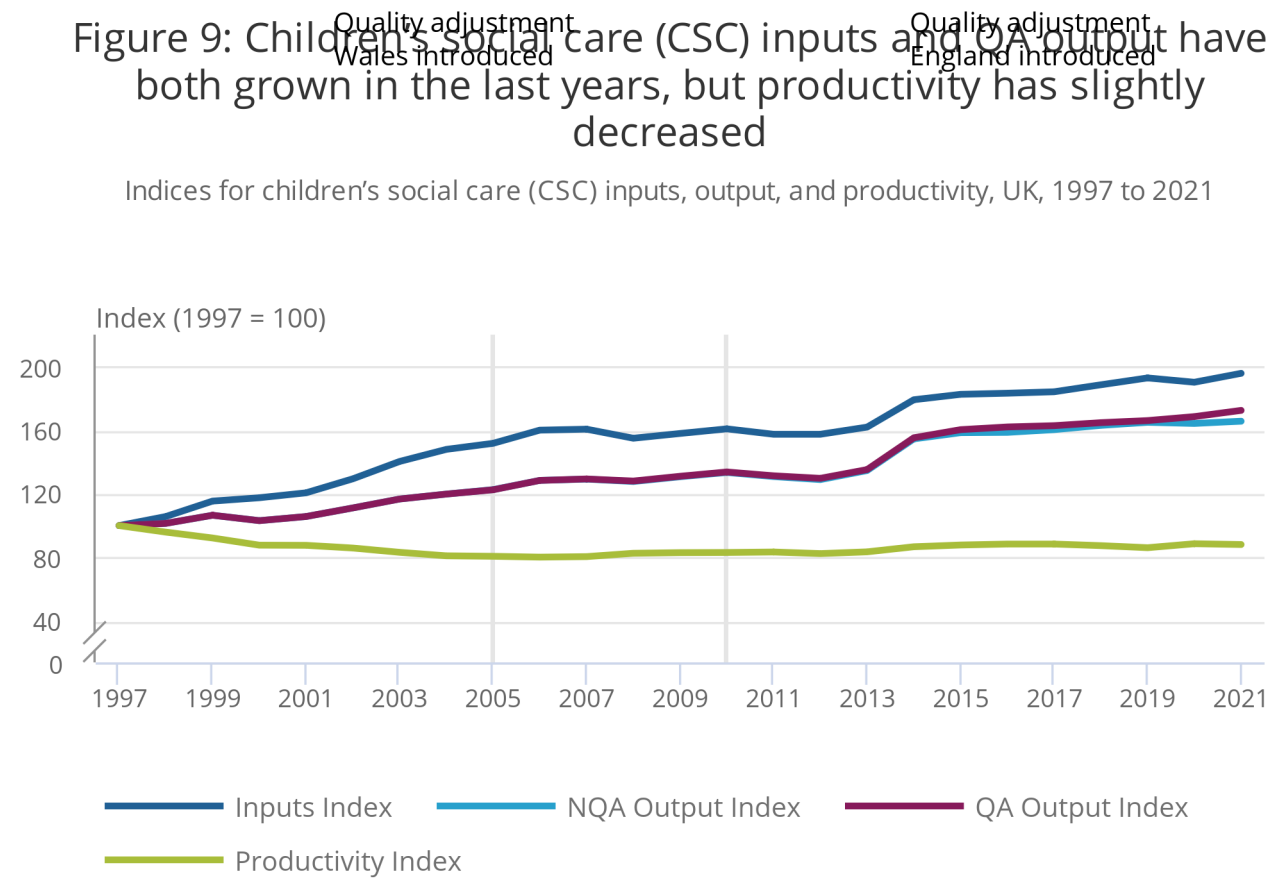
Children's social care productivity dropped by 0.6% on a quality-adjusted basis in 2021. Inputs grew by 2.9% compared with the previous year. Quality-adjusted output grew by 2.3%, while non-quality-adjusted output grew by 0.8%. The quality-adjusted output takes into account both the quality of services delivered and the intensity of needs, as explained in our Improved methods for total public service productivity methodology article from 2019.

Inputs rose slightly more than outputs in 2021, possibly reflecting a more challenging coronavirus (COVID-19) pandemic environment. Both labour and goods and services expenditure were the primary contributors to inputs growth in 2021.

Some indicators measuring the quality of services have improved, resulting in positive growth in quality-adjusted output in 2020 and 2021. However, some indicators that would normally be indicative of improved quality (for example, levels of re-referrals) may have been affected by changes to service delivery because of the pandemic. As a result, the quality measures in 2020 and 2021 may not be as fully comparable with the quality measures in pre-pandemic years.

Figure 9: Children's social care (CSC) inputs and QA output have both grown in the last years, but productivity has slightly decreased

Indices for children's social care (CSC) inputs, output, and productivity, UK, 1997 to 2021



Source: Public service productivity from the Office for National Statistics

Notes:

1. The majority of quality adjustment for children's social care is introduced from 2010 onwards, with small differences in QA and NQA output on account of additional quality adjustment for Wales extending back to 2005.

9 . Social security administration

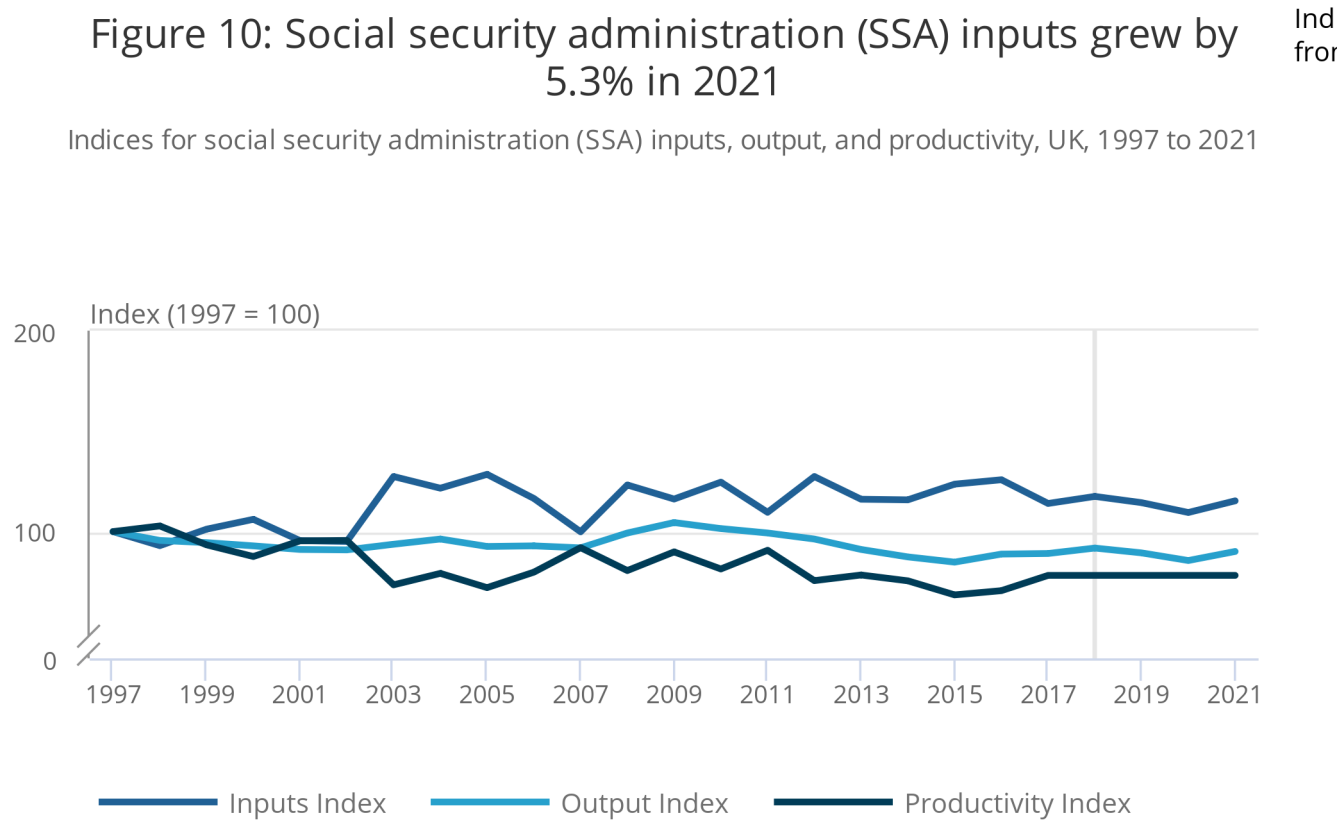
Following a decline of 4.3% in 2020, inputs into social security administration (SSA) grew by 5.3% in 2021.

From 2018, output is assumed to be equivalent to inputs for SSA. This is because output estimates have become less robust following the introduction of Universal Credit. Productivity growth is therefore constant (0% growth) since 2018. The treatment of Universal Credit and updating the output model for SSA is being investigated as part of our Public Services Productivity Review.

This change in methods is described in Section 13: Data sources and quality.

Figure 10: Social security administration (SSA) inputs grew by 5.3% in 2021

Indices for social security administration (SSA) inputs, output, and productivity, UK, 1997 to 2021



Source: Public service productivity from the Office for National Statistics

Notes:

1. "Indirect" means output is measured using the "output-equals-inputs" convention.

These statistics reflect the activities related to the administration of social security. SSA can be affected substantially by events happening in the wider economy, such as an economic downturn or a change in the UK's employment rate and the general state of the UK labour market. In comparison to the other service areas, the SSA inputs index shows a high degree of volatility. The mechanisms behind this are being investigated as part of our Public Services Productivity Review.

10 . Police and immigration, defence and "other" government services

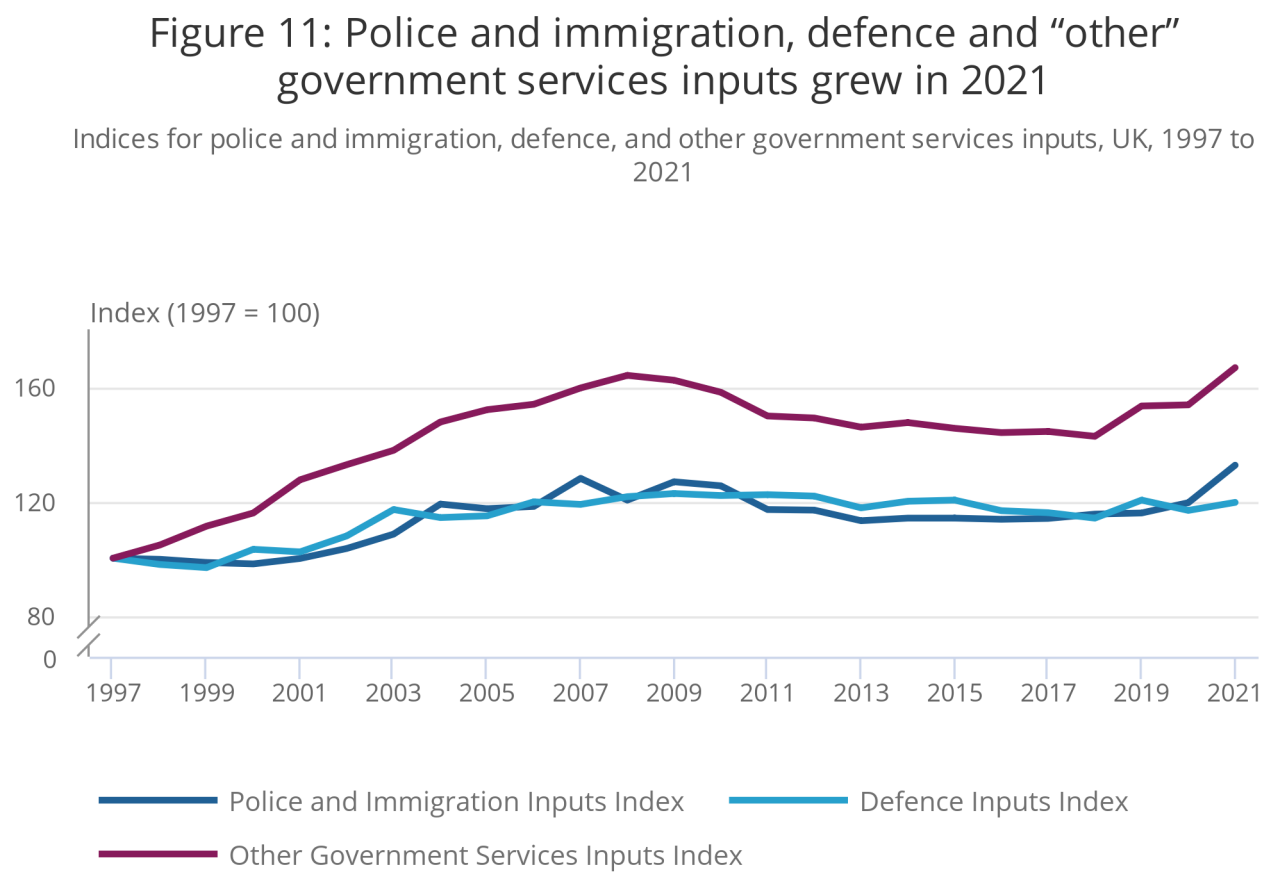
Police and immigration, defence and other government services are service areas in which all output is indirectly measured. This happens because of difficulties in identifying and measuring output for collective services. Where the "output-equals-inputs" convention is applied, productivity growth is zero by definition.

Police and immigration inputs grew by 10.9% in 2021, a sharp increase on previous years. This was influenced in part by the growth in police numbers following the Uplift recruitment programme, as explained on the National Police Chiefs' Council website, (accounting for approximately one third of the overall growth in inputs). Additional pressures on immigration services have also affected the increase in inputs. See further details on police and immigration methods in Section 13: Data sources and quality.

In 2021, defence inputs grew by 2.4% following a fall of 3% in 2020. Inputs into "other" government services grew by 8.4% in 2021 following growth of 0.3% in 2020.

Figure 11: Police and immigration, defence and “other” government services inputs grew in 2021

Indices for police and immigration, defence, and other government services inputs, UK, 1997 to 2021



Source: Public service productivity from the Office for National Statistics

11 . Public service productivity, data

Public service productivity estimates: education
Dataset | Released 26 March 2024
Inputs, output and productivity indices and growth rates for education service. Includes estimates of quality adjustment, sub-service expenditure and revisions.

Public service productivity estimates: healthcare
Dataset | Released 26 March 2024
Public service healthcare growth rates and indices for inputs, quality and non-quality- adjusted output and productivity, totals and components, for UK, 1995 to 2021.

Public service productivity estimates: total public services
Dataset | Released 26 March 2024
Inputs, output and productivity indices and growth rates for total public services. Includes estimates of quality adjustment, service expenditure and revisions.

12 . Glossary

Public services

These are services delivered by or paid for by government (central or local). This includes publicly funded services delivered by non-government providers - for example, the provision of nursery places by the private sector, where these places were funded by the government.

Direct output measurement

Using a cost-weighted activity index to estimate the non-quality-adjusted output of a service provided, such as the number of students in state schools, adjusted for attendance and weighted by school phase. Differs from indirect output measurement, where output is assumed equal to inputs.

Quality adjustment

A statistical estimate of the change in the quality of a public service, using an appropriate metric, such as safety in prisons as part of the public order and safety adjustment.

Classification of the Functions of Government

The Classification of the Functions of Government (COFOG), as explained on the Eurostat website, is the structure used to classify government activities. It is defined by the United Nations Statistics Division.

Service area

The way we refer to the breakdown of public services into nine areas, closely following COFOG.

Intermediate inputs

Also referred to as "goods and services", or "intermediate consumption". Intermediate inputs include goods and services used up in the provision of a public service, such as utilities, energy, professional services, and medical supplies, among others.

Capital inputs

Also referred to as "consumption of fixed capital".

Capital consumption is the decline in the value of fixed assets owned as a result of normal wear and tear when providing public services. An example of this would be emergency vehicles used to attend emergency calls. Another aspect of capital consumption is the coverage of anticipated terminal costs, such as decommissioning costs of medical equipment, or clean-up costs of landfill sites.

Deflator

A price index used to remove inflation effects from current price estimates of expenditure to provide a volume estimate.

Nowcast

The nowcasts are a product of the observed annualised quarterly series in 2021 and 2022 and the relationship between the observed annual series and annualised quarterly series in 1997 to 2019 (excluding 2020 because of the impact of the coronavirus (COVID-19) pandemic). They are produced using an experimental, dynamic regression approach (an extension of autoregressive integrated moving average (ARIMA) modelling). In this method annualised quarterly data are used as predictors of the unavailable annual data.

13 . Data sources and quality

Healthcare

We have improved the quantity output measures for dental services, ophthalmic services, NHS 111 and NHS 111 online, and preventative care (public health). We have also added changes to the patient experience and GP outcomes quality adjustments.

Since 2020, we have included NHS Test and Trace and COVID-19 vaccination outputs in this series, applying the same methods established for the UK National Accounts. These new services were established to manage and mitigate the impact of the coronavirus (COVID-19) pandemic and represent a sizeable contribution to healthcare output in 2021.

A review of inputs, specifically the value of goods and services used in the provision of healthcare activities (intermediate consumption), contributed to some small improvements, of which the overall impact is minimal.

More information on these changes can be found in our Improved methods for total public service productivity 2021 methodology article.

Education

While education's quantity output in public service productivity is estimated in a similar way to national accounts, there are slight differences in the coverage and source data used to compile productivity estimates.

Regarding the quality adjustment, it should also be noted that while some data on teacher-assessed attainment were available in 2021, they were not comparable with non-teacher assessed attainment data and were therefore not used to determine the quality of education.

Instead, data from Ofqual's National Reference Test (NRT) were used as an indicator of secondary school academic performance at GCSE level in 2020 and 2021. The NRT is a short test taken by Year 11 students who are due to sit their GCSEs that year. The questions reflect those that would be asked in a mathematics or English examination. The test was implemented to monitor the performance of students over time, without the accountability pressures of GCSEs. In March 2020, the NRT was taken by students just before coronavirus restrictions were introduced.

Standard Assessment Tests (SATs) growth rates for primary schools were held constant in circumstances where SAT data were unavailable. More information can be found in our Improved methods for total public service productivity 2021.

Public order and safety

Restrictions on court activity during the coronavirus pandemic have affected data. The Ministry of Justice warn that reoffending data continue to be affected by the backlog and timeliness of cases during, and after, the pandemic. As a result, reoffending rates have been held constant from the last unaffected period (July to September 2018), and data continue to be fixed for 2021.

The current method also includes an update to labour inputs for the fire and rescue service. A fire-specific labour deflator is used throughout the entire series.

Social security administration

Because activity data for Universal Credit are not yet available, output has been assumed to be equal to inputs and therefore productivity is assumed to be unchanged from 2018 onwards. Development work is being undertaken to produce improved output measures.

Police and immigration

While the scope of the police and immigration service area has not changed from 2020, the service area name has been expanded to make it clearer that it includes inputs for both police and immigration, within the same service area. The current police and immigration input index series reported in this publication includes some revisions of data for the years 2007 to 2020. This is largely because of the re-classification of some police and immigration revenue in the Blue Book, resulting in an uplift to the inputs index estimates.

As part of the broader work within our Public Service Productivity (PSP) Review on improving methods for capturing police and immigration, we plan to evaluate how inputs and related revenue are dealt with in PSP annual statistics, and the impact.

Defence

The defence inputs series has been revised back to 1997, because of the use of an updated Ministry of Defence deflator, which comes from the defence inflation report.

Splining

Where data are received on a financial- or academic-year basis a statistical technique known as splining is used to align these data to the calendar year. The method that we at the Office for National Statistics (ONS) use is a cubic spline, which calculates a quarterly path for the annual data (in the financial or academic year). The method follows a set of constraints to ensure that the quarterly path experiences no artificial changes in the slope or level of the series and that the average or sum of the four quarters for a particular academic or financial year is equal to the annual data used. This quarterly path can then be re-aggregated up to a calendar year by averaging or summing the four quarters of the calendar year.

While a cubic spline can create a steady quarterly path when there is little volatility in the annual series, a large shock to the annual series can lead to volatility in the quarterly path. This was the case where the effects of COVID-19 led to large changes from 2019 to 2020 and from 2020 to 2021.

As the calculation of a cubic spline is dependent upon four consecutive annual data points, this shock affects not just the quarterly path at the time of the coronavirus (COVID-19) pandemic, but also the years immediately preceding and succeeding the pandemic. This impact has been reduced where possible by combining two series of data (one splined series without the shock and one adjusted series following the shock) to reduce the impact of the shock on the surrounding years. We are working to improve this methodology for future releases to reduce the impact of a shock to the series.

Acknowledgements

With particular thanks to colleagues in the Public Sector Division and everyone in the Public Service Productivity Review team for their contributions and support.

The authors would like also to thank colleagues from varied government departments, NHS England, NHS Wales, the Northern Ireland Executive, the Scottish Government and the Welsh Government.

14 . Related links

Public service productivity, healthcare, England: financial year ending 2022
Article | Released 22 March 2024
Estimates of output, inputs and productivity for public service healthcare in England, with additional estimates for the UK.

Improved methods for total public service productivity: total, UK, 2021
Methodology | Last revised 8 March 2024
Explaining data and methodological improvements to education and healthcare inputs, output and quality adjustment, used in the upcoming public service productivity article.

Public Services Productivity Review progress report: February 2024
Article | Released 20 February 2024
Update on progress toward making improvements to public services productivity measures as part of the Public Services Productivity Review.

Public service productivity, UK: 1997 to 2022
Article | Released 17 November 2023
An overview of UK annual public service productivity between 1997 and 2020, and a new experimental measure for the path of annual UK public service productivity in 2021 and 2022.

Public service productivity, adult social care, England: financial year ending 2021
Article | Released 25 July 2022
Trends in the inputs, output and productivity of publicly-funded adult social care between financial year ending 1997 and financial year ending 2021.

Sources and methods for public service productivity estimates
Methodology | Last revised 11 May 2022
Sources and methods information for the Public service productivity: total, UK publication, detailing the main concepts, output and inputs measures by service area.

International comparisons of the measurement of non-market output during the coronavirus COVID-19 pandemic
Methodology | Last revised 21 February 2022
Exploration of international differences in the methodologies used to measure non-market output and analysis of the implications for international comparisons of gross domestic product during the coronavirus (COVID-19) pandemic.

Improved methods for total public service productivity: total, UK, 2019
Methodology | Last revised 20 January 2022
Explaining methodological improvements to education quality adjustment, children's social care, and healthcare output, used in the 2019 public service productivity article.

15 . Cite this article

Office for National Statistics (ONS), released 26 March 2024, ONS website, article, Public service productivity: total, UK, 2021