

# Information paper

## Quality and Methodology Information

### General details

Title of output: Regional Gross Value Added.  
Abbreviated title: GVA.  
Designation: National Statistics.  
Geographic coverage: UK (NUTS).  
Date of last SQR or QMI: September 2009.  
Contact details: regionalaccounts@ONS.

### Executive summary

Regional Gross Value Added (GVA) is a legal requirement of the European Union (EU) statistical body, [Eurostat](#)<sup>1</sup>. Estimates are compiled in compliance with the [European System of Accounts 1995 \(ESA 95\)](#)<sup>2</sup> and are consistent with the standards set out in the United Nations System of National Accounts 1993 ([SNA93](#))<sup>3</sup>.

GVA is the value generated by any unit engaged in the production of goods and services. It is measured at current basic prices, excluding taxes (less subsidies) on products. GVA plus taxes (less subsidies) on products is equivalent to Gross Domestic Product (GDP).

Regional GVA is measured using the income approach, which involves adding up the income generated by resident individuals or corporations in the production of goods and services. It is calculated gross of deductions for consumption of fixed capital, which is the amount of fixed assets used up in the process of production in any period.

The GVA estimates cover the UK as a whole and are broken down to [Nomenclature of Units for Territorial Statistics \(NUTS\)](#)<sup>4</sup> regions. NUTS is a hierarchical classification of spatial units that provides a breakdown of the European Union's territory for producing regional statistics which are comparable across the Union. Regional GVA estimates are compiled at three levels of NUTS geography:

NUTS1: 12 regions - Wales, Scotland, Northern Ireland and the nine English regions. There is a thirteenth region known as Extra-Regio which accounts for economic activity that cannot be assigned to any specific region. For the UK this consists mainly of the activities of UK embassies and forces overseas

NUTS2: 37 regions - mainly groups of counties and unitary authorities; can be referred to as sub-regions

NUTS3: 139 regions - principally individual counties and unitary authorities; also known as local areas

The contribution to GVA of UK embassies abroad and UK forces stationed overseas is included in Extra-Regio, along with the elements relating to activities taking place on the continental shelf. As these cannot be assigned to specific regions they are assigned as Extra-Regio GVA.

National totals are allocated to regions using the most appropriate available regional indicators, acquired from administrative sources and structural business surveys. The national totals are consistent with those in the latest published UK National Accounts.

Estimates are produced annually in December and are published on the ONS website in the form of a statistical bulletin. The GVA Statistical Bulletin can be downloaded free from the National

Statistics website at 9.30am on the day of publication. ONS policy allows a list of agreed officials, including the Chancellor of the Exchequer and key stakeholders such as the devolved administrations of Scotland, Wales and Northern Ireland, to have access 24 hours prior to domestic publication. These GVA Estimates are then delivered to Eurostat at the end of December.

This document contains the following sections:

- Output quality
- About the output
- How the output is created
- Validation and quality assurance
- Concepts and definitions
- Other information, relating to quality trade-offs and user needs
- Sources for further information or advice

## Output quality

This document provides a range of information that describes the quality of the data and details any points that should be noted when using the output.

ONS has developed [Guidelines for Measuring Statistical Quality](#)<sup>5</sup>; these are based upon the six European Statistical System (ESS) Quality Dimensions. This document addresses these quality dimensions and other important quality characteristics, which are:

- Relevance
- Timeliness and punctuality
- Accuracy
- Comparability and coherence
- Output quality trade-offs
- Assessment of user needs and perceptions
- Accessibility and clarity

More information is provided about these quality dimensions in the sections below.

## About the output

### Relevance

*The degree to which the statistical outputs meet users' needs.*

### User needs

Current Price estimates are published for the variables: total GVA, GVA per head of population and GVA per head index at NUTS1, NUTS2 and NUTS3 levels. GVA per head of population is a useful way of comparing areas of different sizes and is an important indicator for both domestic and European policy purposes. It is calculated using the entire resident population of each area (including the economically inactive).

Data on the components of income are available at NUTS1 (compensation of employees (CoE) and gross operating surplus (GOS)) and NUTS2 (just CoE). At the NUTS1 and NUTS2 levels, components are provided for 20 industries. At the NUTS 3 levels only ten industries components are available. At NUTS1 level, estimates are published on both workplace and residence basis, to reflect the impact of commuting.

The annual provision of regional and sub-regional GVA at NUTS2 level is an EU requirement. The statistical body of the EU, [Eurostat](#)<sup>1</sup>, collates regional GVA from all member states, which is used in the allocation of Objective 1 structural funding. The structural funds account for approximately one third of the EU budget.

In December 2011, Regional GVA estimates were published using the revised [Standard Industrial Classification 2007](#)<sup>6</sup> (SIC 2007) for the first time, in keeping with EU regulations. The new SIC reflects the move towards more services based economies over the past 20 years.

Regional GVA estimates are used by the UK Government and the devolved administrations of Northern Ireland, Scotland and Wales to formulate and monitor economic policy and allocate resources.

These statistics are used in Northern Ireland in the development of the 'Programme for Government' and the 'Economic Strategy for Northern Ireland'. They are also used in respect of Public Service Agreement (PSA) targets for several Northern Ireland government departments. The Scottish Government uses regional GVA estimates in the compilation of the national indicator 'Grow exports at a faster rate than GDP'. They are also used in the Scottish Quarterly Gross Domestic Product (Income) (GDP(I)) system which is part of the Scottish National Accounts Project (SNAP). These estimates are also used by the Welsh Government as an economic measure in its 'Programme for Government', which sets out and monitors economic policy for Wales.

The Department for Business, Innovation and Skills (BIS) uses regional and sub-regional GVA estimates in monitoring regional economic performance. They are currently used in the BIS publication 'Regional Economic Performance Indicators'. Local authorities and regional observatories use these statistics to facilitate evidence-based policy making and economic intervention, e.g. assisting Local Enterprise Partnership (LEP) applications and regional growth funding bids.

The GVA statistics inform the general public about the state of the economy and provide insight into the relative economic positions of local areas and issues such as the 'North-South divide'. The House of Commons Library produces a standard note about these statistics and they are frequently the subject of parliamentary questions raised by Members of Parliament.

### **Meeting future needs**

A project is underway to develop estimates of real regional GVA growth using a production approach. A [report](#)<sup>7</sup> of progress to date and plans for these statistics was published in March 2012.

ONS is aware that users would like less of a time lag on the data. [Eurostat](#)<sup>1</sup> has introduced a new requirement of accelerating the NUTS2 GVA data to 12 months after the reference period rather than the current 24 months. ONS will produce NUTS2 GVA totals (but not with an industry breakdown) 12 months after the reference period by 2014.

The published estimates of regional GVA currently lead with headline data, which has been smoothed to remove volatility, with raw estimates also provided. Some users have commented that they find raw estimates more useful. ONS Strategy and Standards Directorate is currently reviewing current practice. It is planned to publish the findings of this review in spring 2012 and consult users prior to implementing any changes.

ONS Strategy and Standards Directorates are also reviewing commuting effects in the workplace-based GVA estimates. It is planned to publish the findings of this review in spring 2012 and consult users prior to implementing any changes.

Changes to NUTS geographies proposed by the UK during the 2010 NUTS review came into force on the 1<sup>st</sup> January 2012. This includes boundary changes affecting NUTS2 and NUTS3 areas in England. The changes will be implemented in the regional GVA estimates to be published in December 2012. For more information please refer to the link here: [Codes for Eurostat Geography](#)<sup>8</sup>.

### **Main data sources**

The primary input datasets for the compilation of regional GVA are listed in the table below. They include administrative data and data from structural business surveys. The data are acquired from both internal (ONS) and external sources.

**Table 1: Summary of main data sources for indicators used in Regional apportionment**

Data source	Nature of data	Use in Regional Accounts
Annual Survey of Hours and Earnings ( <a href="#">ASHE</a> ) <sup>9</sup>	Workplace-based sample survey of wages and salaries	Allocates CoE
Short Term Employment and Vacancy Results ( <a href="#">STEVR</a> ) <sup>10</sup>	Workplace-based sample survey of number of employees	Allocates CoE
Pay As You Earn income tax data ( <a href="#">PAYE</a> ) <sup>11</sup>	Administrative data provided by H M Revenue & Customs (HMRC), the national tax authority	Allocates CoE and gross trading profits of partnerships
Business Register and Employment Survey ( <a href="#">BRES</a> ) <sup>12</sup>	Structural business survey, a sample survey of enterprises	Allocates CoE
Annual Business Survey ( <a href="#">ABS</a> ) <sup>13</sup>	Structural business survey, a sample survey of enterprises	Allocates mixed income, CoE and gross trading profits of other corporations (manufacturing only)
Agricultural Accounts from Department for Environment, Food and Rural Affairs (DEFRA)	Structural business survey of the agricultural sector, a sample survey	Used to allocate rental income, CoE, mixed income, gross trading profits of partnerships, and holding gains, all in the agricultural sector
Labour Force Survey (LFS)	A residence-based sample survey answered by employees	Used to apportion CoE data for the activities of households industry
Defence Analytical Systems and Advice (DASA)	Administrative data about the number and location of armed forces personnel	Used to apportion national estimates of forces pay by region and Extra-Regio
The Department for Energy and Climate Change (DECC)	Administrative data about onshore gas and oil profits	Used to apportion gross operating surplus
Self-Assessment income tax data	Administrative data provided by HMRC, the national tax authority. Derived from self-assessment tax returns completed by self-employed sole traders and partners	Used to generate data about reported profits. This forms an indicator which is used to apportion gross trading profits or partnerships, and mixed income

### **Timeliness and punctuality**

*Timeliness refers to the lapse of time between publication and the period to which the data refer.*

*Punctuality refers to the gap between planned and actual publication dates.*

ONS currently publishes estimates of regional GVA at NUTS1, NUTS2 and NUTS3 levels annually in December. All estimates are constrained to the latest UK National Accounts Blue Book.

At NUTS1 level, estimates of the main variables (GVA, GVA per head and GVA per head indices) and component of income (CoE & GOS) are published around 12 months after the end of the reference period. Twenty industry data are published 24 months after the end of the reference period. Estimates are available from 1997.

At NUTS2 level, estimates of the main variables, Industrial (20 industry) and component (CoE) data are released 24 months after the reference period. Estimates are available from 1997.

At NUTS3 level, estimates of the main variables and industrial (ten industry) are released 24 months after the reference period. Estimates are available from 1997.

The availability of key datasets in the production process is a factor in the publication timetable for example, HMRC self assessment data becomes available at the end of October. The availability of balanced Blue Book UK totals dictates the provision of industrial estimates published 24 months after the reference period. Regional GVA estimates have never missed publication deadlines because of data unavailability.

For more details on related releases, the [UK National Statistics Publication Hub](#)<sup>14</sup> is available online and provides 12 months' advance notice of release dates. In the unlikely event of a change to the pre-announced release schedule, public attention will be drawn to the change and the reasons for the change will be explained fully at the same time, as set out in the [Code of Practice for Official Statistics](#)<sup>15</sup>.

## How the output is created

The production of regional NUTS2 Gross Value Added (GVA) is a legal requirement of the [European Commission \(Eurostat\)](#)<sup>1</sup>.

A detailed description of the methodology used to compile Regional GVA estimates can be found in the [Regional Accounts Methodology guide](#)<sup>16</sup>.

Regional GVA estimates are produced at current basic prices and measured using the income approach. This involves adding up the income generated by resident individuals or corporations in the production of goods and services. It is calculated gross of deductions for consumption of fixed capital, which is the amount of fixed assets used up in the process of production in any given period.

The main components of income based GVA are:

- Compensation of employees
- Gross Operating Surplus (the sum of self employment income, gross trading profits and surpluses, non-market capital consumption, rental income less holding gains)
- Taxes (less subsidies) incurred as a result of engaging in production, independently of the quantity or value of goods and services produced (e.g. business rates)

The UK Regional GVA estimates are constrained to the latest published UK '[Blue Book](#)<sup>17</sup>' totals. The 'Blue Book' is the name given to the annual publication of United Kingdom National Accounts by ONS.

Data sources used as regional indicators are collated, analysed and validated. Outliers are identified using graphical analysis and quality adjustments are assigned where necessary. Where appropriate, issues are referred back to the suppliers. The resulting validated datasets are then subject to a peer review process so that their impact can be assessed, prior to their inclusion in the Statistical Analysis System (SAS), output production system.

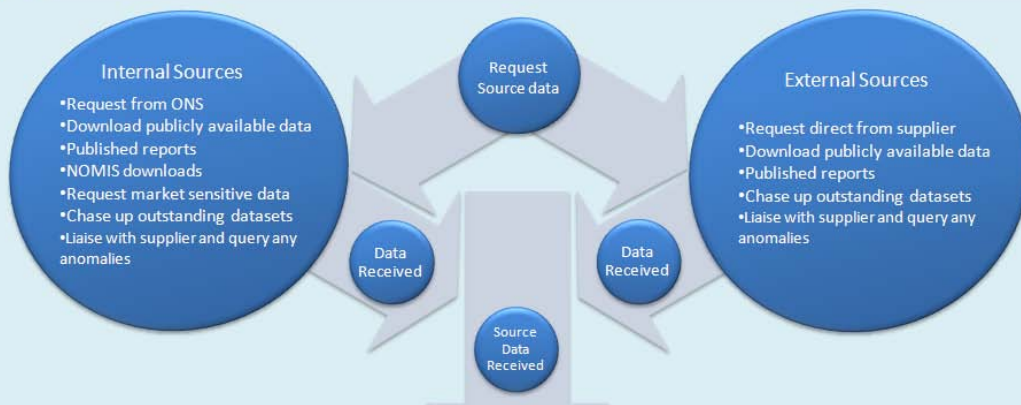
The remaining datasets are fed directly into the output production system following analysis and validation. The production system then creates 'near final' output estimates (including published variables and components) which are submitted to peer reviewers for feedback, prior to the publication phase. Any changes resulting from this feedback are implemented via further production runs.

The following flowchart illustrates this process in three stages, data collection, validation & quality assurance and publication:

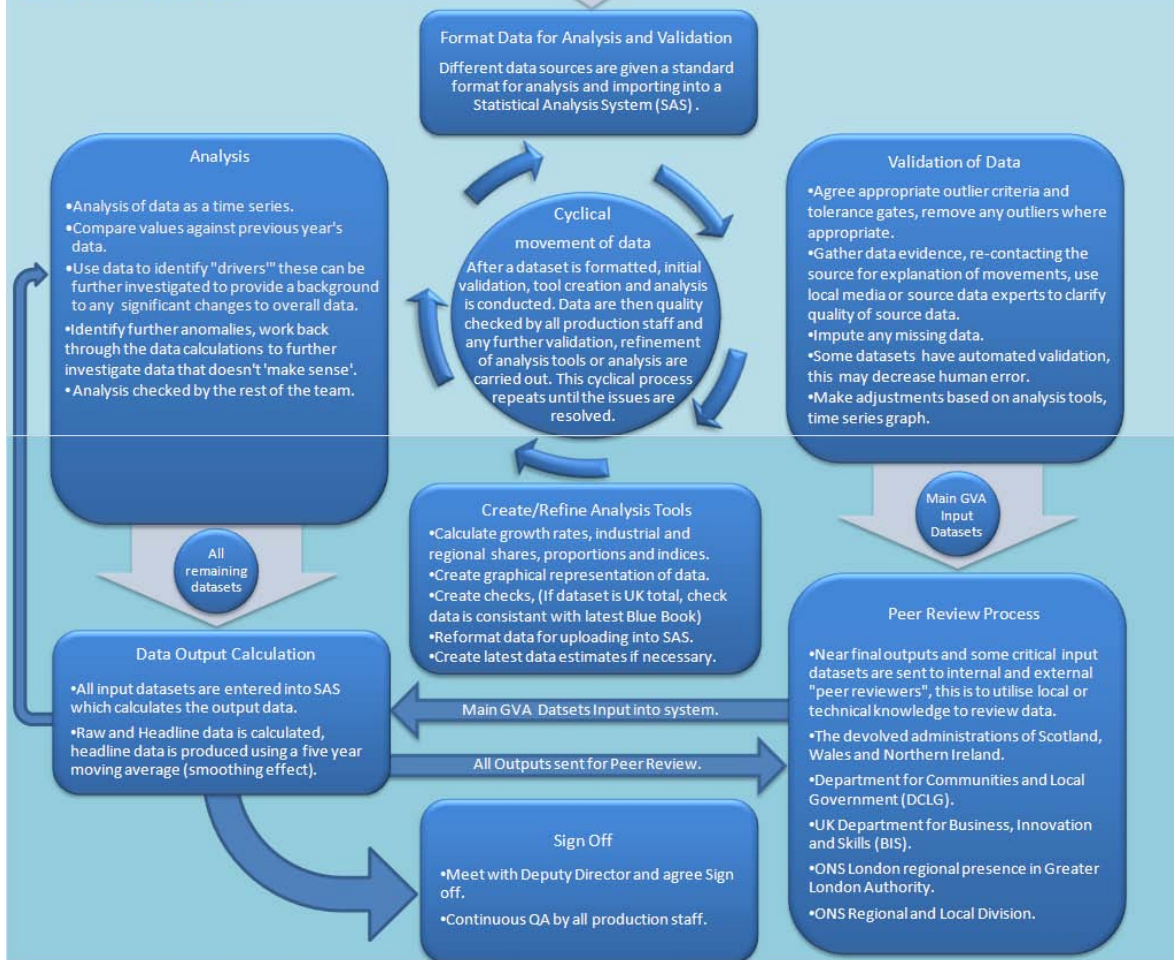


## Regional GVA production process

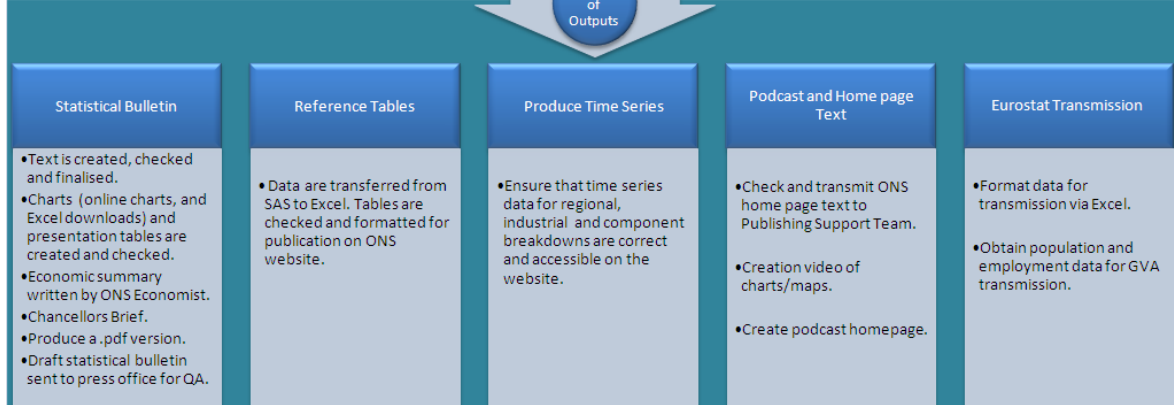
### 1.1 Data Collation



### 1.2 Analysis & Quality Assurance



### 1.3 Publication



## National controls

National aggregates (national control totals) for components are split and allocated to NUTS1 regions using appropriate regional indicators. The control totals are consistent with those in the latest published UK National Accounts. They are supplied to Regional Accounts branch by National Accounts branches in ONS. Industry totals are obtained from [UK Supply and Use Tables](#)<sup>18</sup> (except for the latest years). These estimates are then revised in the following year's publication.

The national aggregates are split and re-allocated to regions using the most appropriate regional indicator available. The national total is allocated to the NUTS1 regions, then NUTS1 totals are split and allocated to NUTS2 sub-regions, and finally NUTS2 totals are split and allocated to the NUTS3 local areas.

## Headlines and raw estimates

Output data are currently smoothed using a five year moving average. The resulting figures are known as 'headline' figures, and are published in addition to 'raw' (i.e. unsmoothed) data. Data are smoothed to minimise the effect of sampling and non-sampling errors. ONS Strategy and Standards Directorate has recently reviewed this process. A [report](#)<sup>19</sup> is available on the website.

## Commuting adjustments

Compensation of employees and therefore regional GVA is adjusted for commuting. This is currently done at NUTS1 level only, for the following regions: East of England, London, and South East. In practice, this reflects commuting into London from the other two regions. ONS Strategy and Standards Directorate is currently reviewing the methodology and the extent of the commuting effect.

## Validation and quality assurance

### Accuracy

*The degree of closeness between an estimate and the true value.*

All regional GVA estimates are constrained to the [Blue Book](#)<sup>17</sup> totals. Below the UK level, NUTS1 to NUTS3 estimates are constrained to sum to the UK totals.

As mentioned in the 'How the Output is Created' section national totals for GVA components (consistent with the latest Blue Book publication) are collated and allocated to regions using appropriate indicators. Consistency checks are built into the processing system to ensure that regional aggregates tally with national controls.

The key regional indicators are acquired from published administrative data and structural business surveys. These data are subject to a rigorous validation process that entails a peer review process and a mechanism for referral back to data suppliers where appropriate.

Sample sizes can vary from 100 per cent (HMRC Self assessment data) to 1 per cent (HMRC PAYE data). These variations are unavoidable in the collation of reliable time series data for the calculation of GVA. Improvements in the GVA methodology or changes in administrative source data allows for reviewing the available sources for higher quality datasets or more timely publications. This is an ad hoc and continuous process which does not include major revisions to the methodology of GVA.

The vast majority of source data are annually updated, however some datasets are published biennially, or on an ad hoc basis. These missing values are imputed as stated in the Validation of data process (fig 1.2). As with sample size, potential improvements to the methodology are reviewed whenever new data become available or when significant changes to the source data affect the final values. Where no recent estimate is available, the previous year's data may be used. It is important to note however, that these issues are rare because of the completeness of the main source data.

## The peer review process

Input datasets are compared to the data received for each variable in previous years. Large fluctuations against previous years are investigated using regional intelligence compiled within the branch supplemented by information received from peer reviewers. Following this investigative procedure, any anomalous data that remain unexplained are followed up where appropriate with

the relevant data providers for clarification.

The Regional Accounts team then make adjustments to the source datasets where necessary. These are discussed with the peer reviewers. The regional knowledge of these statisticians can help to explain or contest deviations from trend within their particular regions.

The output variables for publication are subject to rigorous scrutiny, including looking at growth and shares, graphical depictions and comparisons with previous data. These data are then sent for peer review. Resulting queries are investigated and rectified where necessary. Feedback from this process is documented on the Regional Accounts database and any actions implemented within the results.

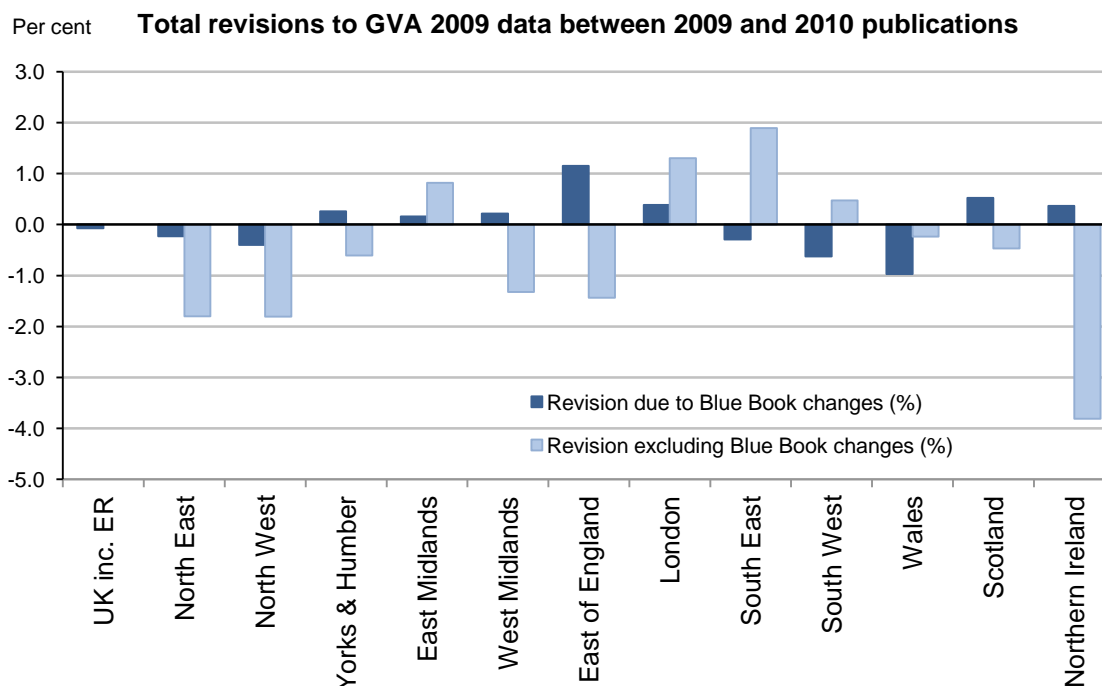
The Regional Accounts team has developed links with the peer reviewer network. This includes the devolved administrations of Northern Ireland, Scotland and Wales, Department for Communities and Local Government (DCLG), BIS, the ONS London regional presence stationed at the Greater London Authority (GLA) and an ONS economist. Regular dialogue has resulted in significant refinements to the peer review process. Regional intelligence is shared and we are able to keep peer reviewers informed of any significant developments.

### Methodology review

As mentioned in 'How the output is created' section, the ONS Strategy and Standards Directorate has undertaken reviews covering the application of smoothed 'headline' data and also the commuting effect. The [report](#)<sup>19</sup> is available on the website.

### Revisions

The complex process by which the GVA estimates are produced means that it is not currently possible to define the accuracy of the estimates in terms of detailed statistical properties, for example through their standard errors. Therefore, the reliability of the estimates is measured by the extent of revisions. Headline UK estimates will be affected by revisions to the [Blue Book](#)<sup>17</sup> control totals, while revisions to NUTS1 and lower level estimates will come from revisions to the data used to apportion the UK GVA estimates and revisions to the Blue Book. The chart below illustrates the revisions to GVA 2009 estimates between the publication in December 2011 and the data published in December 2010.



The regional accounts revisions policy mirrors that of Blue Book where national totals are subject to revision in 'open' years. The whole time series is open to revisions from the Blue Book. In addition, revisions to the regional indicator datasets will impact upon the regional GVA estimates.

It is important to note that there are other aspects of accuracy, which revisions analysis cannot



attempt to measure. A value can be reliable (as in not revised) without being accurate.

A detailed explanation of revisions to the 2011 published estimates can be found at section 9 of the background notes in the [GVA statistical bulletin](#)<sup>20</sup>.

### Comparability and coherence

*Comparability is the degree to which data can be compared over time and domain e.g. geographic level. Coherence is the degree to which data that are derived from different sources or methods, but refer to the same topic, are similar.*

### Comparability

GVA estimates published in December 2011 are available on a consistent basis at all NUTS level back to 1997 on a [SIC 2007](#)<sup>6</sup> basis. Data are available to download on SIC 2003 basis covering years 1989 - 2009. Prior to 1989 data are not comparable as [ESA95](#)<sup>2</sup> replaced ESA 79, resulting in conceptual, geographical and methodological changes.

The GDP estimates published by [Eurostat](#)<sup>1</sup> use raw figures. Taxes less subsidies on products are apportioned to NUTS1 regions using GVA proportions by regions to convert from GVA to GDP. Since international standards such as ESA 95 are used in the production of the Regional Accounts, the figures should be directly comparable with the regional accounts of other EU countries. However, the revisions policies of these countries should be examined before comparing data for historic periods. It should also be noted that the UK produces estimates of GVA using the income approach (along with Ireland). All other EU countries use the production approach. This is measured by calculating total production in the economy and the total costs of that production (except labour costs) and subtracting the latter from the former.

### Coherence

Estimates of approximate GVA are also published as part of the [Annual Business Survey \(ABS\)](#)<sup>13</sup> release. These estimates are used in the production of annual [Supply and Use Tables](#)<sup>18</sup> for the compilation of the UK GDP. The ABS GVA estimates differ from the UK Regional Accounts estimates as the ABS does not allow fully for National Accounts issues and concepts such as taxes or subsidies or income earned-in-kind.

The [Welsh Short Term Indicators \(WSTI\)](#)<sup>21</sup> team is responsible for producing, on the behalf of the Welsh Government, quarterly estimates of Welsh market sector output growth. These estimates are presented as short term output indices. Estimates are not currently produced for the Agriculture, Forestry and Fishing and the Public Administration, Education and Health sectors. These indicators at present cover 73 per cent of the Welsh economy. The methodologies used for these indicators are different from those used to compile regional GVA. A key difference is that the WSTI are constant price indicators (deflated to remove the effects of price inflation) whereas regional GVA is a current price measure.

Workplace and residence based estimates are produced at the NUTS1 level. For most regions these two estimates are the same, however significant commuting effects have been found in London, the East and the South East. These three regions are adjusted to take account of commuting between these regions.

### Concepts and definitions

*Concepts and definitions describe the legislation governing the output, and a description of the classifications used in the output.*

Regional GVA is a legal requirement under EU law and supplied to Eurostat consistent with the standards set out in the European System of Accounts [ESA95](#)<sup>2</sup>. The sub-regional NUTS2 estimates are used to inform EU structural funding decisions. GVA estimates are produced at current prices which do not allow for inflation.

In December 2011 Regional GVA estimates were published using the revised [Standard Industrial Classification 2007](#)<sup>6</sup> for the first time, in keeping with EU regulations.

The GVA estimates cover the UK as a whole and are broken down to [Nomenclature of Units for Territorial Statistics \(NUTS\)](#)<sup>4</sup> regions. NUTS is a hierarchical classification of spatial units that provides a breakdown of the European Union's territory for producing regional statistics which are comparable across the Union. Regional GVA estimates are compiled at three levels of NUTS

geography:

NUTS1: 12 regions - Wales, Scotland, Northern Ireland and the nine English regions. There is a thirteenth region known as Extra-Regio which accounts for economic activity that cannot be assigned to any specific region. For the UK this consists mainly of the activities of UK embassies and forces overseas

NUTS2: 37 regions - mainly groups of counties and unitary authorities; can be referred to as sub-regions

NUTS3: 139 regions - principally individual counties and unitary authorities; also known as local areas

## **Other information**

### **Output quality trade-offs**

*Trade-offs are the extent to which different dimensions of quality are balanced against each other.*

GVA provisional results are published 12 months after the reference period. The time lag between publication and the period to which the data refer is the minimum required to produce estimates of a high enough quality to meet all user needs. These results are revised 24 months after the reference period and can be considered more reliable in that they include balanced Blue Book figures that were not available for the provisional release.

Further information on release dates are contained in the 'Timeliness and punctuality' section of this paper.

### **Assessment of user needs and perceptions**

*The processes for finding out about users and uses, and their views on the statistical products.*

In July 2011 the UK Regional Accounts team met with Eurostat as part of a quality initiative aimed at encouraging harmonisation of compilation methods for regional statistics. Regional Accounts are also participants in the ongoing Eurostat Task Force of Member States, to develop a regional accounts methodology manual. The team has frequent dialogue with Eurostat.

The Regional Accounts team has developed links with the devolved administrations of Northern Ireland, Scotland and Wales, DCLG, BIS, the ONS London regional presence stationed at the GLA and an ONS economist. As previously mentioned, these are the key domestic users of the regional GVA statistics. Regional Accounts generally meet these users on an annual basis to share views on methodology and ongoing developments.

More recently the Regional Accounts team has developed links with DCLG and BIS. The intention is to bolster our peer review capacity and share regional intelligence, following the cessation of the ONS regional presence in March 2011.

For more information on the use of Regional GVA outputs and the peer review process, please refer to the 'How the output is created' section.

ONS recently published a [user feedback survey](#)<sup>22</sup> in response to the [UK Statistics Authority assessment report](#)<sup>23</sup>.

## **Sources for further information or advice**

### **Accessibility and clarity**

*Accessibility is the ease with which users are able to access the data, also reflecting the format in which the data are available and the availability of supporting information. Clarity refers to the quality and sufficiency of the release details, illustrations and accompanying advice.*

The GVA Statistical Bulletin and [Time Series](#)<sup>24</sup> datasets are available for download after 9.30a.m. on the day of publication.

[UK Government policy on pre-release](#)<sup>24</sup> of data allows a list of agreed officials to have access to data 24 hours before publication.

The GVA Statistical Bulletin conforms to the standards set out in the [Code of Practice for Official Statistics](#)<sup>15</sup> for the protocol on release practices.

For queries on the GVA series, compilation methods, quality information or difficulties in finding the latest figures, contact the GVA team by e-mail: [regionalaccounts@ons.gov.uk](mailto:regionalaccounts@ons.gov.uk) or by telephone on 01633 456878.

ONS's recommended format for accessible content is a combination of HTML webpages for narrative, charts and graphs, with data being provided in usable formats such as CSV and Excel. The ONS website also offers users the option to download the narrative in PDF format. In some instances other software may be used, or may be available on request. Available formats for content published on the ONS website but not produced by the ONS, or referenced on the ONS website but stored elsewhere, may vary. For further information please refer to the contact details at the beginning of this document.

For information regarding conditions of access to data, please refer to the links below:

- [Terms and conditions \(for data on the website\)](#)
- [Copyright and reuse of published data](#)
- [Pre-release access \(including conditions of access\)](#)
- [Access to unpublished data](#)
- [Access to microdata via the Virtual Microdata Laboratory](#)
- [Accessibility](#)

### Useful links

In addition to this Quality and Methodology Information, Basic Quality Information relevant to the GVA publication can be found in the background notes of the [Statistical Bulletin](#)<sup>20</sup>

### References

	Title of Reference	Website Location
1	Eurostat	<a href="http://epp.eurostat.ec.europa.eu/portal/page/portal/eurostat/home">http://epp.eurostat.ec.europa.eu/portal/page/portal/eurostat/home</a>
2	European System of Accounts 1995 (ESA 95)	<a href="http://circa.europa.eu/irc/dsis/nfaccount/info/data/ESA95/en/esa95en.htm">http://circa.europa.eu/irc/dsis/nfaccount/info/data/ESA95/en/esa95en.htm</a>
3	United Nations: Introduction to the System of National Accounts, 1993 (SNA 93)	<a href="http://unstats.un.org/unsd/nationalaccount/sna.asp">http://unstats.un.org/unsd/nationalaccount/sna.asp</a>
4	Nomenclature of Units for Territorial Statistics (NUTS)	<a href="http://epp.eurostat.ec.europa.eu/portal/page/portal/nuts_nomenclature/introduction">http://epp.eurostat.ec.europa.eu/portal/page/portal/nuts_nomenclature/introduction</a>
5	Statistical Quality	<a href="http://www.ons.gov.uk/ons/guide-method/method-quality/quality/index.html">http://www.ons.gov.uk/ons/guide-method/method-quality/quality/index.html</a>
6	Standard Industrial Classification (Sic 2007) Nomenclature of Units for Territorial Statistics (NUTS)	<a href="http://www.ons.gov.uk/ons/guide-method/classifications/current-standard-classifications/standard-industrial-classification/index.html">http://www.ons.gov.uk/ons/guide-method/classifications/current-standard-classifications/standard-industrial-classification/index.html</a> <a href="http://epp.eurostat.ec.europa.eu/portal/page/portal/nuts_nomenclature/introduction">http://epp.eurostat.ec.europa.eu/portal/page/portal/nuts_nomenclature/introduction</a>
7	Report on the development of real Gross Value Added using the production approach	<a href="http://www.ons.gov.uk/ons/guide-method/development-programmes/all-sopp-programme/regional-gva--production-approach-/index.html">http://www.ons.gov.uk/ons/guide-method/development-programmes/all-sopp-programme/regional-gva--production-approach-/index.html</a>
8	Codes for Eurostat geography	<a href="http://www.ons.gov.uk/ons/guide-method/geography/products/names--codes-and-look-ups/names-and-codes-listings/names-and-codes-for-eurostat-geography/index.html">http://www.ons.gov.uk/ons/guide-method/geography/products/names--codes-and-look-ups/names-and-codes-listings/names-and-codes-for-eurostat-geography/index.html</a>
9	Annual Survey of Hours and Earnings	<a href="http://www.ons.gov.uk/ons/guide-method/method-quality/specific/labour-market/annual-survey-of-hours-and-earnings/index.html">http://www.ons.gov.uk/ons/guide-method/method-quality/specific/labour-market/annual-survey-of-hours-and-earnings/index.html</a>
10	Short Term Employment and Vacancy Results (STEVR)	<a href="http://www.ons.gov.uk/ons/taxonomy/index.html?nscl=Workforce+Jobs">http://www.ons.gov.uk/ons/taxonomy/index.html?nscl=Workforce+Jobs</a>
11	HMRC Statistics (Pay As You Earn and Self-Assessment)	<a href="http://www.hmrc.gov.uk/stats/">http://www.hmrc.gov.uk/stats/</a>
12	Business Register and Employment Survey (BRES)	<a href="http://www.ons.gov.uk/ons/guide-method/surveys/respondents/business/a-z-of-business-surveys/business-register-and-">http://www.ons.gov.uk/ons/guide-method/surveys/respondents/business/a-z-of-business-surveys/business-register-and-</a>

		<a href="#">employment-survey/index.html</a>
13	Annual Business Survey	<a href="http://www.ons.gov.uk/ons/guide-method/surveys/list-of-surveys/survey.html?survey=Annual+Business+Survey+%28ABS%29">http://www.ons.gov.uk/ons/guide-method/surveys/list-of-surveys/survey.html?survey=Annual+Business+Survey+%28ABS%29</a>
14	UK National Statistics Publication Hub	<a href="http://www.statistics.gov.uk/hub/index.html">http://www.statistics.gov.uk/hub/index.html</a>
15	Code of practice for Official Statistics	<a href="http://www.statisticsauthority.gov.uk/assessment/code-of-practice/index.html">http://www.statisticsauthority.gov.uk/assessment/code-of-practice/index.html</a>
16	Regional Accounts Methodology guide	<a href="http://www.ons.gov.uk/ons/guide-method/method-quality/specific/economy/regional-accounts/regional-accounts-methodology-guide.pdf">http://www.ons.gov.uk/ons/guide-method/method-quality/specific/economy/regional-accounts/regional-accounts-methodology-guide.pdf</a>
17	UK National Accounts Blue Book	<a href="http://www.ons.gov.uk/ons/rel/naa1-rd/united-kingdom-national-accounts/2011-edition/index.html">http://www.ons.gov.uk/ons/rel/naa1-rd/united-kingdom-national-accounts/2011-edition/index.html</a>
18	Supply and Use Tables	<a href="http://www.ons.gov.uk/ons/taxonomy/index.html?nscl=Supply+and+Use+Tables">http://www.ons.gov.uk/ons/taxonomy/index.html?nscl=Supply+and+Use+Tables</a>
19	Methodological review of smoothing and commuting adjustments in Regional Accounts	<a href="http://www.ons.gov.uk/ons/guide-method/method-quality/specific/economy/regional-accounts/index.html">http://www.ons.gov.uk/ons/guide-method/method-quality/specific/economy/regional-accounts/index.html</a>
20	GVA Statistical Bulletin	<a href="http://www.ons.gov.uk/ons/rel/regional-accounts/regional-gross-value-added--income-approach-/december-2010/stb-regional-gva-dec-2011.html#tab-Key-Figures">http://www.ons.gov.uk/ons/rel/regional-accounts/regional-gross-value-added--income-approach-/december-2010/stb-regional-gva-dec-2011.html#tab-Key-Figures</a>
21	Welsh Short-Term Output Indicators (WSTI) Programme	<a href="http://new.wales.gov.uk/topics/statistics/theme/economy/econ-indices/?lang=en">http://new.wales.gov.uk/topics/statistics/theme/economy/econ-indices/?lang=en</a>
22	User Feedback Survey	<a href="http://www.ons.gov.uk/ons/guide-method/method-quality/user-engagement/the-2011-regional-gross-value-added-and-regional-gross-disposable-household-income-user-consultation.pdf">http://www.ons.gov.uk/ons/guide-method/method-quality/user-engagement/the-2011-regional-gross-value-added-and-regional-gross-disposable-household-income-user-consultation.pdf</a>
23	UK Statistics Authority Assessment Report	<a href="http://www.statisticsauthority.gov.uk/assessment/assessment/assessment-reports/assessment-report-143---uk-regional-accounts.pdf">http://www.statisticsauthority.gov.uk/assessment/assessment/assessment-reports/assessment-report-143---uk-regional-accounts.pdf</a>
24	Regional GVA Time Series	<a href="http://www.ons.gov.uk/ons/datasets-and-tables/data-selector.html?dataset=ragv">http://www.ons.gov.uk/ons/datasets-and-tables/data-selector.html?dataset=ragv</a>
25	Pre Release Access	<a href="http://www.ons.gov.uk/ons/guide-method/the-national-statistics-standard/code-of-practice/pre-release-access/index.html">http://www.ons.gov.uk/ons/guide-method/the-national-statistics-standard/code-of-practice/pre-release-access/index.html</a>