Office for
Statistics Regulation

UK Statistics
Authority

Assessment of compliance with the Code of Practice for Statistics

Statistics on Regional Gross Value Added (Phase Two) *(produced by ONS)*

Assessment Report 337   June 2018

Office for Statistics Regulation

We provide independent regulation of all official statistics produced in the UK. Statistics are an essential public asset. We aim to enhance public confidence in the trustworthiness, quality and value of statistics produced by government.

We do this by setting the standards they must meet in the **Code of Practice for Statistics[1] (the Code)**. We ensure that producers of government statistics uphold these standards by conducting assessments against the Code. Those which meet the standards are given National Statistics status, indicating that they meet the highest standards of trustworthiness, quality and value. We also report publicly on system-wide issues and on the way statistics are being used, celebrating when the standards are upheld and challenging publicly when they are not.

National Statistics

National Statistics status means that official statistics meet the highest standards of trustworthiness of statistical processes, quality and public value and comply with all aspects of the Code. The Office for Statistics Regulation has undertaken this assessment to consider whether the statistics meet the required standard.

Responsibility for complying with the Code does not end with the award of the National Statistics designation. It is the statistics producers' responsibility to maintain compliance and to improve the statistics on a continuous basis. The Office for Statistics Regulation encourages statistics producers to discuss promptly with the regulatory team any concerns about whether its statistics are meeting the appropriate standards. National Statistics status can be removed at any point when the highest standards are not maintained, and reinstated only when standards are restored.

This assessment

This is an assessment of the statistics reported in Regional Gross Value Added (Balanced) UK[2], published by the Office for National Statistics (ONS).

---

[1] https://www.statisticsauthority.gov.uk/code-of-practice/
[2] https://www.ons.gov.uk/economy/grossvalueaddedgva/bulletins/regionalgrossvalueaddedbalanceduk/1998to2016

Contents

Executive Summary

Judgement on National Statistics Status

ES.1 We review here whether the trustworthiness, quality and public value of ONS's statistics on *Regional Gross Value Added (Balanced) UK* [3] (*R-GVA (B)*) statistics merits National Statistics status. Users confirmed to us that in their view the statistics are trustworthy, of high quality and valuable. We found areas were ONS could usefully further enhance the public value and quality of the statistics, the most important of which are described in Tables 1 and 2 of this report. Once the steps outlined in the tables have been taken, it is OSRs view that the statistics merit National Statistics status and we will recommend that the Statistics Authority confirm this.

Key Findings

Public Value

ES.2 Users welcome the new balanced estimates of gross value added, the first statistics based on this approach released in Europe. Before balanced estimates became available, users could choose to use either a production-based or income-based measure of Regional Gross Value Added (R-GVA). Having different measures was confusing and led to uncertainty over which estimate to use. Introducing single balanced estimates removes that confusion. Improving local R-GVA data has come at an appropriate time for policy development as the Government's Industrial Strategy[4] champions "place" as a central pillar of government policy.

ES.3 For some time, statistics users have asked for more-timely R-GVA estimates. ONS met this challenge by innovatively using HMRC Value Added Tax (VAT) data to update production based estimates by a year so that estimates exist for the same reference year. This was a crucial step in creating balanced estimates. Further use of VAT data is intended in 2018, as ONS wants to make use of the extensive coverage of the data to create balanced estimates for much smaller geographies. With the first release of *R-GVA (B)* in December 2017, ONS took significant steps towards maintaining the relevance of the R-GVA statistics by publishing:
- nominal and real-terms data for regions (NUTS 1) and sub-regions (NUTS 2) all published concurrently;
- balanced GVA for 80 industries at the NUTS1 level, and 71 industries at the NUTS2 level

ES.4 We found that the users of the statistics and data, are at the heart of producing these statistics and their needs are well understood. ONS actively seeks the views of users and acts on those views. People's preferences in the way they want to use these statistics are supported. We saw that the statistics and the data are made available equally to all, not given to some people before others. The statistics and data:

- are published at a sufficient level of detail
- are clearly presented, with meaningful explanations
- provide authoritative insights that serve the public good

ONS produces the statistics in forms that enable easy re-use. ONS minimises the burden on individuals and businesses by largely re-using existing data in producing the R-GVA statistics and data. We set out the various sources of data in Annex 1.

---

[3]https://www.ons.gov.uk/economy/grossvalueaddedgva/bulletins/regionalgrossvalueaddedbalanceduk/1998to2016
[4] https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/664563/industrial-strategy-white-paper-web-ready-version.pdf

Quality

ES.5   Users find the methods used to produce the statistics and data in *R-GVA (B)* to be robust. ONS bases the statistics on the most appropriate data to meet user's needs. ONS assess and minimise the impact of the limitations of the data with good explanations about those limitations to users. ONS, in the run up to producing the statistics for the first time, set out in a variety of documents how they assure the statistics and data as accurate, reliable, coherent and timely. Now that the statistics are published and in use, the statistics team told us that they will publish later this year the quality and methods information about the balanced estimates in a single document.

ES.6   ONS uses quality metrics[5] measures in the process of producing balanced estimates. These quality metrics perform a very useful task in arriving at the balanced estimates using an innovative method. However, these quality metrics may be misunderstood by less experienced statistics users as being general indicators of the quality of balanced estimates. Published in a separate spreadsheet it can be difficult to comprehend what insight into quality these statistics offer. ONS could provide more insight into the quality of the statistics if these metrics were more easily understood and accessible.

Trustworthiness

ES.7   Users show confidence in the balanced estimates. They welcomed the public consultation about their introduction where the new methods were explained and opportunities presented to feed-in their views. ONS's openness in listening to users has led to better estimates - most users feel that their suggestions were largely adopted. The statistics team exhibited leadership and technical capability in introducing the improvements. ONS convenes a user group (the Regional Accounts Government Users Group) to involve users in developing the statistics and invites some Government Users annually to review the statistics before publication. Such initiatives show ONS's commitment to building trustworthiness in these statistics.

Next Steps

ES.8   Meeting the requirements set out in this report is fundamental to delivering the value, quality and trustworthiness to achieve and maintain National Statistics status. ONS's Head of Profession is encouraged to:

    i.   develop an action plan to meet the Requirements
    ii.   agree the action plan with ONS senior management, and confirm that it is appropriately resourced
    iii.   share the action plan with the OSR and publish it alongside the statistics
    iv.   seek out peers and support services that can help in delivering the plan – for example, the National Statistician's Good Practice Team
    v.   agree with the regulatory team, how often, and in what form, the statistics team would like to engage about progress against the action plan.

ONS should report back to OSR on the achievement of all requirements by 28 September 2018. There is no set format for reporting but ONS should provide written evidence with links to any published or internal documents as support. Once ONS has shown it has fully addressed the findings and requirements described in Tables 1 and 2 of this report OSR judge that the statistics will meet the principles and practices of the Code of Practice for Statistics. We will then recommend that the Statistics Authority designate the statistics in *R-GVA (B)* as National Statistics.

---

[5]https://www.ons.gov.uk/economy/grossvalueaddedgva/datasets/regionalgrossvalueaddedbalancedqualitymetrics

Chapter 1: Public Value

Introduction

1.1   Value means that the statistics and other numerical information are accessible, remain relevant and benefit society; helping the public to understand important issues and answer key questions.

1.2   Value is a product of the interface between the statistics or other numerical information and those who use them as a basis for forming judgements.

Findings

1.3   Users told us that the new balanced measures make data more user friendly and easier to present to non-expert audiences. Those users we spoke to believe the latest statistics in *R-GVA (B)* are broadly consistent with the economic reality of their region and sub-regions. For the time being, some users want the continued availability of production and income measures to give the most complete picture of regional economies. ONS is currently committed to maintaining publication of the separate production and income approach measures until the balanced estimates become National Statistics. Given that the production and income-based measures will continue to be produced to achieve the balanced estimates, we suggest ONS considers continuing to make available production and income estimates to users beyond their designation as National Statistics, without detracting from the headline balanced measures.

1.4   Users told us that the charts and tables accompanying the statistics in the commentary are very useful, especially Figure 2 comparing industry structures in the Combined Authorities[6], and additional analysis of GVA for those new Combined Authorities.

1.5   Some users wanted ONS to look further into how it splits the GVA of the UK Financial and Insurance industry among the regions and devolved nations – a need we highlighted in Phase 1 of this assessment[7]. ONS ran an industry review of the Financial and Insurance industry[8] and its report details some of the short, medium and long-term improvements it can make to these statistics. We welcome this work and praise ONS for their commitment to enhance the statistics.

1.6   Some users would prefer ONS to publish measures of R-GVA(B) per worker either replacing or presented alongside statistics on R-GVA per head of population[9] for the regions and sub-regions. ONS publishes the R-GVA(B) per worker statistics separately as part of a different suite of statistics and a few weeks after the *R-GVA (B)* publication. The lag in publishing R-GVA(B) per worker is due to extra processing of final R-GVA(B) estimates alongside labour market data. ONS has told users that its aim is to publish as close to concurrent as possible the R-GVA and the regional productivity statistics. While this gap between publishing the respective statistics remains as no more than a few weeks, we believe that ONS broadly meets users' needs. ONS might better signpost to the R-GVA per worker statistics from the *R-GVA (B)* publication.

1.7   Some users told us that they found the existing population details at the regional and Local Authority levels very helpful and would appreciate more detail on the population estimates

---

[6] A combined authority (CA) is a legal body set up using national legislation that enables a group of two or more councils to collaborate and take collective decisions across council boundaries. There are nine such authorities in existence in England

[7] https://www.statisticsauthority.gov.uk/publication/statistics-on-regional-gross-value-added-phase-1/

[8] https://www.ons.gov.uk/economy/grossvalueaddedgva/articles/measurementofthefinanceandinsuranceindustriesinestimatesofregionalgrossvalueadded/2018-04-09#toc

[9] Total GVA(B) estimates in millions of pounds sterling are divided by the total resident population of a region (including the economically inactive) to give GVA per head in pounds sterling

used to present R-GVA per head statistics at sub-regional levels. We suggest ONS investigates extending publication of the population estimates used for its R-GVA per head statistics to other sub-regional levels.

1.8   One of the main benefits of the statistics in *R-GVA (B)* is the availability of the real-terms series i.e. with the effects of inflation removed. Building understanding of and trust in deflators among key users is vital to exploiting the value of the real-terms series. In the first phase of this assessment we required ONS to review whether the current method for deflating regional estimates of regional imputed rent was robust as there was clear evidence of differences in rents across regions of the UK. This yielded good results as ONS found that better deflators were available using the new experimental set of price indices called the Index of private housing rental prices (IPHRP)[10] , available for the countries and regions of Great Britain. ONS used the new deflators in the publication of R-GVA statistics in December 2017.

1.9   Good deflators require good prices data. Mostly ONS collect prices data with a view to producing price indices for the UK as a single geography. In the R-GVA statistics ONS additionally publish implied regional deflators[11] obtained by dividing the value estimates by the volume estimates. These implied regional whole economy deflators reflect the different industrial structure of the regions rather than any actual differences in regional price movements. Apart from the imputed rent element of the real estate sector, where we recommended in Phase 1 of the assessment that ONS use regional price information, the implied regional deflators do not currently use any region-specific price information - they are simply reweighted UK price indices. Despite not being 'true' regional price indices the implied deflators do reflect regional variation in goods and services produced. However, we found evidence of significant differences between the implied regional deflators and some 'true' regional producer price deflators. Feedback from our user and stakeholder engagement suggested that opportunities might exist to develop regional deflators that accord better with producer prices in the regions and nations. Such opportunities could lead to improvements in R-GVA (B) real terms estimates.

1.10   Adopting true regional price deflators depends on regional price data existing with sufficient geographical coverage and for the right periods. We were told by Scottish Government that it uses some additional data in estimating GDP for Scotland in addition to ONS economic data. Scottish Government's access to detailed Scottish industrial data results in its estimates differing from ONS's R-GVA estimates. While detailed data might exist in a specific individual devolved nation or region, ONS would need to examine:

- the availability of regional prices across the regions and nations
- reasons why regional price differences might exist, and
- whether regional price data are more suitable for use than using the UK figures

ONS should investigate whether improvements in the quality of deflators by adopting regional price statistics could be achieved technically and cost-effectively taking account of expected use of the statistics and user need.

1.11   ONS presents for comparative purposes details of GVA for the UK which in the principal R-GVA (B) spreadsheet uses a definition of the UK including the economic activity in areas that cannot be assigned to a specific region such as the North Sea. This unassigned region

---

[10]https://www.ons.gov.uk/economy/inflationandpriceindices/bulletins/indexofprivatehousingrentalprices/march2018

[11] The derived implied regional deflators are an output from the nominal and real-terms series, presented so that users have some quasi-regional deflators to use in their own analyses and further development of regional estimates. The deflators ONS uses to create the real-terms series are mostly the same deflators used in the national GDP(O) series, apart from imputed rental of owner-occupiers.

of the North Sea, along with embassies and armed forces stationed abroad, are presented in *R-GVA (B)* as a separate region called Extra Regio. People often make comparisons between the UK and devolved nations and regions and a balanced like-for-like analysis would compare, for example, UK onshore GVA against a devolved nation's or a region's onshore GVA. ONS publishes UK onshore nominal GVA figures for their GVA per head statistics[12] but they might do more to make users aware of the availability of these UK onshore GVA statistics which users could use for like-for-like comparisons. We suggest that ONS reviews how it might better guide users to the availability of all-UK GVA onshore data, for instance through a note in the metadata.

Table 1: Value – Findings and Requirements

Findings	Examples		Requirement
Producer prices for goods and services can vary significantly in different parts of the UK. Mostly real terms statistics in *R-GVA (B)* are deflated using one uniform all-UK price deflator for each industry in getting to real R-GVA (B) data. Potential might exist to develop the range of deflators to better reflect regional differences in prices	• recent consumer price data from ONS[13] suggests that in 2016, prices in London were on average 7.0% higher compared with the UK average[14] • the relative consumer price level of Northern Ireland was the lowest of all the UK regions, having prices that were on average 2.3% lower than the UK	1	ONS should investigate whether improvements in the quality of deflators by adopting regional price statistics could be achieved technically and cost-effectively taking account of expected use of the statistics and user need

---

[12]https://www.ons.gov.uk/economy/grossvalueaddedgva/datasets/nominalregionalgrossvalueaddedbalanced perheadandincomecomponents

[13]https://www.ons.gov.uk/economy/inflationandpriceindices/articles/relativeregionalconsumerpricelevelsuk/20 16

[14] This data relates to differences in consumer price inflation whereas GVA deflators would be based on producer price inflation. ONS's implied regional price deflators suggest regional variations in movements in producer prices

Chapter 2: Quality

Introduction

2.1   Quality means that the statistics and numerical information represent the best available estimate of what they aim to measure at a particular point in time and are not materially misleading.

2.2   Quality is analytical in nature and is a product of the professional judgements made in the specification, collection, aggregation, processing, analysis, and dissemination of data.

Findings

2.3   Based on our analysis and from what users told us, we conclude that the statistics are fit for their intended uses, are based on appropriate data and methods and are not materially misleading.

2.4   ONS is developing a new quality and methods information document about the statistics in *R-GVA (B)* to be released ahead of or alongside the 2018 statistics. ONS produced over time many individual publications about the quality and methods of the balanced estimates stored in different webpages, so we welcome the consolidation of these into one document.

2.5   The use of VAT data to update the 2015 production estimates to create 2016 estimates for the purposes of balancing introduces new uncertainty in the R-GVA estimates. Using information from hundreds of thousands of VAT returns could reduce subsequent revision of provisional estimates. ONS used the same approach to its household disposable income statistics, where HMRC PAYE income data was used to project forward statistics on growth in earnings and employment from existing survey data. In addition to the impact of using VAT data, ONS expects that the balanced measures of R-GVA will be less subject to sampling variability year to year, as they use far more data than the income and production estimates do on their own. Users will only see the impacts of these changes on revisions after the publication of each year's estimates. ONS intends to monitor the revisions performance. We noted that a user suggested to ONS that once revisions to the balanced estimates are evident it should show how the revised estimates compare to the previous year's provisional estimates for the different approaches. We suggest that such triangulation could help establish the impact of the new method on revisions and help build confidence in the quality of the statistics.

2.6   ONS produce quality metrics which result in a numerical rating between 0 and 1, to four decimal places for all data cells. The resulting spreadsheet comprises thousands of cells. The metrics are key to the balancing process and should not be used to assess the quality of the overall balanced estimate. The metrics could be easily misinterpreted by less expert audiences making them far less useful to those seeking a broad assessment of the quality of the R-GVA balanced estimates. As part of ONS's consultation on introducing statistics in *R-GVA (B)*, some users suggested alternative ways of assessing the indicators. ONS said that some feedback would need careful consideration and involve discussions with ONS methodologists. We support the notion of publishing quality metrics when they offer insight as a broad assessment of the quality of the estimate and can be easily checked by users. ONS should review the best way of making quality metrics both more useable to a less expert audience and more accessible generally. Further, we suggest that ONS through its stakeholder and user engagement, communicates the conclusions of discussions with its methodologists about users' suggestions relating to alternative quality metrics.

Table 2: Quality – Findings and Requirements

Findings	Examples	Requirement	
ONS publish quality metrics used in balancing the estimates. Due to the level of detail, the insights offered by the metrics are obscured which may limit their usefulness.	• A user observed to ONS that as the balanced estimate is introduced it will be vital to continue to be transparent about how it is derived from the income and production estimates, and how it is performing • Some users felt unable to offer much comment to ONS on the way the balancing is achieved and the use of quality metrics due to lack of knowledge	2	ONS should review the best way of making quality metrics both more useable to a less expert audience and more accessible generally

Chapter 3: Trustworthiness

Introduction

3.1   Trustworthiness means that the statistics and other numerical information are produced free from vested interest, based on the best professional judgement of statisticians and other analysts.

3.2   Trustworthiness is a product of the people, systems and processes within organisations that enable and support the production of statistics and other numerical information.

Findings

3.3   Users reported a high regard for the statisticians' professional and technical skills, reflecting confidence in their good statistical judgement and that their behaviours and actions reflect the public interest. ONS underpins the production of these statistics by effective and transparent planning, and providing clear lines of responsibility and accountability for observance of the Code.

Annex 1: About the Statistics

The Statistics

A1.1 The European Union's (EU) statistical office, Eurostat legally require the transmission of Regional GVA statistics. Estimates are compiled in compliance with the European System of Accounts 2010 (ESA 2010)[15] consistent with the standards set out in the United Nations System of National Accounts 1993 (SNA93). This is to ensure that the R-GVA estimates are directly comparable with those of other EU countries through adopting standard methods and classifications.

A1.2 The R-GVA statistics have developed significantly since the Authority first confirmed the National Statistics designation of statistics in *Regional Gross Value Added (income approach) UK* in 2012. ONS has improved the source data and regionalisation methods. The estimates are more-timely than they used to be and produced at many more different levels of economic geography than in 2012. ONS's current *R-GVA (B)* series runs on a consistent basis from 1998 to 2016.

A1.3 The R-GVA statistics are key components in supplying insights into regional productivity. ONS has used the R-GVA statistics in showing that the UK has large inter-regional differences in labour productivity (in fact, some of the largest inter-country differences in Europe). ONS draws attention to regional differences in labour productivity in its article *UK Productivity Research Summary* [February 2018][16] but it is not yet clear what causes the regional divergences.

Uses and Users

A1.4 Users of R-GVA statistics are wide-ranging across the UK and include academics and researchers, devolved administrations, local authorities, private organisations such as think tanks and consultants and other statistics producers within ONS. Devolved nations, combined authorities, local authorities, local enterprise partnerships and Government Departments rely heavily on these statistics. They also depend on access to data from statistical surveys conducted by ONS, towards which some contribute financially to increase the sample sizes for their respective countries. Local authorities require estimates of key variables to compare themselves with other authorities and nationally.

A1.5 Users we spoke to had diverse uses for the statistics including:

- establishing the growth sectors within regions to allocate funding support
- distributing European Support funding
- evaluating city deals and as triggers for further public funding support of such deals
- estimating the size of regional economies
- examining the regional distribution of the impacts of economic shocks
- examining the impacts of greater devolution and Brexit
- teaching students of economic classes at universities
- modelling regional business cycles
- constructing new econometric forecasting models

---

[15] http://ec.europa.eu/eurostat/web/esa-2010
[16] https://www.ons.gov.uk/economy/economicoutputandproductivity/productivitymeasures/articles/ukproductivityanalyticalrelease/february2018

Data Sources and Methods

A1.6   The source data are:

Data source	Nature of data	Use in R-GVA	Delivery of data due
Annual Business Survey (ABS)	Structural business survey, a sample survey of enterprises	Allocates mixed income, Compensation of Employees (CoE) (manufacturing only) Allocates Gross Trading Profits across a wide range of industries. Also allocates output and intermediate consumption for bulk of the UK economy	Mid May
Labour Force Survey (LFS)	A residence-based sample survey answered by employees	Used to apportion CoE data for the activities of households	Mid-June
Annual Survey of Hours and Earnings (ASHE)	Workplace-based sample survey of wages and salaries	Allocates CoE Also used in conjunction with BRES data to allocate public expenditure	Mid-August
Business Register and Employment Survey (BRES)	Structural business survey, a sample survey of enterprises	Allocates CoE Also used in conjunction with ASHE data to allocate public expenditure	Mid-September
Agricultural Accounts from Department for Environment, Food and Rural Affairs (DEFRA)	Structural business survey of the agricultural industry, a sample survey	Used to allocate rental income, CoE, mixed income, gross trading profits of partnerships, and holding gains, all in the agricultural industry Also Used for output and intermediate consumption for part of agricultural industry (crops and livestock)	Mid October

Ministry of Defence	Administrative data about the number and location of armed forces personnel	Used to apportion national estimates of forces pay by region and Extra-Regio	Mid October
Business, Energy and Industrial Strategy Department (BEIS)	Administrative data about onshore gas and oil profits	Used to apportion gross operating surplus, CoE, output and intermediate consumption	Mid October
Regional estimates of bank and building society fees and commission and Financial Intermediation Services Indirectly Measured (Bank of England)	Administrative data supplied by the Bank of England at NUTS1.	Allocates GVA for monetary intermediation	Late October
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 of partnerships, and mixed income Also forms an indicator which is used to apportion gross value added for sole traders	Early November
Value Added Tax (VAT) Turnover Data	Administrative data provided by HMRC, the national tax authority, covering the turnover of all UK businesses registered for VAT	Used to estimate growth in output between the latest year for which there is ABS data (t-2) and the provisional year (t-1)	Monthly (data for this use will generally be near complete around March/April)

Source: ONS R-GVA (I) Quality and Methods Information[17] and additional information supplied by ONS

Annex 2: The Assessment Process

A2.1   This Assessment was conducted from September 2017 to May 2018.

A2.2   This report was prepared by the Office for Statistics Regulation and approved by the Regulation Committee on behalf of the Board of the UK Statistics Authority, based on the advice of the Director General for Regulation.

A2.3   The regulatory team – Iain Russell and Kimberly Cullen – agreed the scope of and timetable for this assessment with representatives of ONS in October 2017. The regulatory team discussed and met with the statistics team at ONS in September 2017 and in April 2018 to review compliance with the *Code of Practice for Statistics*, taking account of the evidence provided and researched.

A2.4   Part of the assessment process involves consideration of the views of users. We approach known and potential users of these statistics. This process is not a statistical survey, but it enables us to gain some insights about the extent to which the statistics meet users' needs and users feel that the statistics' producers engage with them. We are aware that responses from users may not be representative of wider views, and we take account of this in the way that we prepare Assessment reports. In the first phase of our assessment of R-GVA statistics looking at the income and production-based R-GVA estimates we met and talked to 42 people and received 3 email responses. In this second phase, looking at the balanced estimates we received responses from 9 people, most of whom we spoke to earlier. We also benefited from reviewing what people told ONS during its public consultation on introducing balanced estimates[18]. ONS received 23 written responses, via an online survey and by email. In addition, ONS met with many stakeholders, at events held in Belfast, Birmingham, Cardiff, Edinburgh and London. We attended the event held in Edinburgh.

2.5   The main feedback to ONS from their consultation was:

- Strong support for the introduction of a single balanced measure of regional GVA, and some want ONS to continue publishing the pre-balanced income and production measures, at least for the first few years
- Most were happy with the proposed method and some offered suggestions for potential methodology enhancements
- Most were happy with the test results of the balanced estimates, and some offered suggestions about areas that might benefit from further attention
- Most were happy with ONS's plans for the presentation of the data, and some offered suggestions for additional supporting information

Key documents - the regulatory team reviewed the following key documents:

➢ Consultation documents regarding the introduction of *R-GVA (B)* and ONS's response
➢ Articles on Measurement of the finance and insurance industries in estimates of regional gross value added; Development of a balanced measure of regional gross value added; and Analysis of the extent of modelling and estimation in regional gross value added
➢ Minutes of Regional Accounts Government Users Group Meetings held on 21 September 2017 and 24 January 2018
➢ Revisions Triangles for R-GVA (P) from December 2017

Contact us

For any queries about this assessment, or the work of the Office for Statistics Regulation in general, please email regulation@statistics.gov.uk

---

[18] https://consultations.ons.gov.uk/national-accounts/consultation-on-balanced-estimates-of-regional-gva/