

The Value of Economic Statistics: Baseline report

Heather Rolfe, Johnny Runge
and Sylaja Srinivasan

ESCoE Technical Report 05

February 2020

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Abstract

The principal aim of this research is to provide indicative evidence on the value of ONS economic statistics to society. A second aim is to explore the potential of areas of investigation recommended by the UN Economic Commission for Europe (UNECE) Taskforce relating to how official statistics are valued, including in monetary terms. This report presents the initial findings of a baseline survey and qualitative research. The survey and focus groups were carried out to assess the needs, expectations and satisfaction in service provision of users of official economic statistics, with the survey providing an overall picture and the focus groups more detail and explanation of responses. The survey used some of the survey questions recommended by the UNECE Taskforce to explore how official statistics are valued, though the questions were adapted to be specific to economic statistics and the UK context. The baseline report was initially completed in September 2017 and updated in March 2018, after the completion of further primary research. A follow-up study will be carried out in 2020 which will include further exploration on the development of a measure of monetary value. This project was commissioned and funded by the ONS.

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Executive Summary

The principal aim of this research is to provide indicative evidence on the value of ONS economic statistics to society¹. A second aim is to explore the potential of areas of investigation recommended by the UN Economic Commission for Europe (UNECE) Taskforce relating to how official statistics are valued, including in monetary terms. This report presents the initial findings of a baseline survey and qualitative research. The survey and focus groups were carried out to assess the needs, expectations and satisfaction in service provision of users of official economic statistics, with the survey providing an overall picture and the focus groups more detail and explanation of responses. The survey used some of the survey questions recommended by the UNECE Taskforce to explore how official statistics are valued, though the questions were adapted to be specific to economic statistics and the UK context. The baseline report was initially completed in September 2017 and updated in March 2018, after the completion of further primary research. A follow-up study will be carried out in 2020 which will include further exploration on the development of a measure of monetary value. This project was commissioned and funded by the ONS.

The research consisted of a survey and focus groups. The survey was carried out online and was completed by 254 respondents, of whom 218 were included in the analysis. As a result of significant time constraints in the collection of data for this project, we followed a non-probability sampling method, aimed at maximising the number of respondents across a range of user groups, rather than ensuring representativeness to the wider user population or within subgroups. As such, the following analysis does not claim to make any generalisations to the wider population of ONS economic statistics users or any subgroup analysis, since numbers are too small to be reliable. Rather, in conjunction with the focus group findings, our analysis will identify and discuss common themes.

Focus groups involving a total of 49 people were carried out between July 2017 and March 2018. Participants included survey respondents and additional identified users. This stage of the research provides further insight into a range and diversity of views and experiences of high-level, regular users of ONS economic statistics. As such, the findings may not necessarily reflect the views of the wider population who are less frequent users and access the statistics for different purposes. The findings should be considered within the context of these strengths and limitations.

How survey respondents make use of ONS economic statistics

Survey respondents and focus group participants used ONS economic statistics regularly. One in four survey respondents used ONS economic statistics daily and a further 31 per cent used them weekly.

Respondents made particular use of series on industry and business, GDP and national accounts and employment, wages and the labour market.

¹ The statistics of interest were therefore those in the ONS economic statistics series: industry and business statistics, international trade and balance of payments, public sector finance, productivity, inflation and price indices, GDP and national accounts, regional and local economic statistics and employment, wages and the labour market.

Survey responses show the value of economic statistics for research purposes, with nearly three-quarters of respondents saying they use them for this purpose. Specific purposes for which respondents use ONS economic statistics include reports and publications, modelling and forecasting, policy formation, monitoring or evaluation, teaching, business, market or regional analysis.

ONS statistics were seen as essential or important for these purposes and for users' work in general.

Accessing ONS economic statistics

Research participants largely used the ONS website directly to access economic statistics. Survey and focus group participants reported extensively on their experiences of using the website, in particular issues around accessing data and navigating the ONS site. Many of the issues raised are already known by ONS. The comments and issues raised in this research have been collated and will feed directly into the ONS Website Redevelopment Plan, as representative of the expert user population.

Whilst many acknowledged that the website and search function had improved in recent years, there was general agreement that the economic statistics series and data could be structured in a more intuitive way. Participants said they would like more explanation of methodologies and definitions of economic concepts throughout the statistics.

Respondents' experiences of contacting ONS staff were good and a number of suggestions were made for further improvements, for example through the creation of a separate statistics enquiry line.

Satisfaction and improving ONS economic statistics

Most respondents expressed satisfaction with the statistics themselves, especially in terms of their trustworthiness and freedom from political interference.

Some research participants suggested improvements to the provision of regional and local economic statistics, international trade and balance of payments and to productivity. They also identified gaps in the data arising from changes to the economy, for example the growth of the service sector, digital economy and new forms of employment.

Many respondents were of the view that the ONS should improve its metadata and methodological documentation in terms of its detail and quality.

Divergent views were expressed on the role of analysis and commentary. The prevailing view was that the ONS should focus its attention on statistical issues rather than their interpretation. There was also a view that the ONS should engage more actively in the public debate to criticise and challenge inappropriate use of economic statistics.

It was also seen as important for ONS to be clear about the limitations and weakness, of statistics, including regarding guidance on revisions.

Measuring the value of ONS economic statistics

In response to the recommendations by UNECE, the research explored possible ways of measuring and monetising the value of ONS economic statistics. Through survey and focus groups methods, we explored 'stated preference' and 'revealed preference' techniques. These were not found to be useful as ways of exploring this question, in part because users of economic statistics are not potential purchasers as individuals, and often are not involved in, or have knowledge of, their organisations' budgetary priorities. Instead, we included survey questions on non-monetary value of economic statistics and had wider discussions in the focus groups about the conceptualisation of valuing economic statistics.

Overall, it was clear that research participants attached great importance to ONS economic statistics. But they struggled to place a monetary value on it.

Survey respondents described how ONS economic statistics impacted on policy development and evaluation, economic forecasting and modelling, and business decision-making. Around 4 out of 5 of those surveyed believed that the statistics are essential for their work and that their loss would have a major or severe impact.

The research suggests that these issues are best explored using qualitative methods. Focus group participants talked of how ONS economic statistics are invaluable for informed decision-making, but that this would be challenging to reliably measure. Generally, participants seemed more engaged with other ways of conceptualising the value of economic statistics than in monetary terms. A strong theme of many of the discussions was that economic statistics should be seen as a 'public good'.

Focus group participants suggested that the value of economic statistics might be conceptualised in the cost of poor and uninformed decision-making arising from the absence of (high quality) ONS economic statistics. This approach has been used in a subsequent case study as part of this project.

Some participants, mostly from the financial sector, suggested that a proxy value for ONS economic statistics might be derived through exploring how much organisations would value gaining early access to releases of economic statistics.

Some participants, echoing the point that the statistics are a 'public good' believed it would be wrong for the ONS to introduce charges for data, except for specific services and possibly for early access. This indicates that future research aiming to measure the monetary value of economic statistics based on willingness-to-pay approaches should be aware of the tendency of respondents to provide protest answers and refuse to accept the hypothetical nature of the research.

ONS and public engagement

Our survey largely reached regular rather than occasional users of ONS economic statistics and professional users rather than the general public. However, some participants believed that the ONS should be more outward-facing and engage more

directly with users. There was also a view that it could improve its communication with businesses and with the general public.

Diverse views were expressed on ONS's use of social media, but it was recognised as an increasingly important means of conveying economic statistics and generating new users. Beyond this, such engagement was seen as potentially improving understanding of statistics and the economy, improving public and personal decisions and, to some extent, democratic society.

1. Introduction

Summary

This report presents the initial findings of a baseline survey and qualitative research on the value of ONS economic statistics. The baseline report was initially completed in September 2017 and updated in March 2018, after the completion of further primary research. A follow-up study will be carried out in 2020.

The survey used some survey questions which were recommended by the UNECE Taskforce to measure the value of official statistics, but adapted specifically to economic statistics and the UK context. The survey was carried out online and was completed by 254 people (218 of whom were included in the analysis). Respondents were distributed across age groups, though concentrated in ages 25 to 54. Almost three-quarters were male, probably reflecting the profile of users of economic statistics in the financial and economic sector.

Survey respondents worked in a wide range of organisations, including universities and research institutes, government departments and public organisations, ~~for~~ private businesses, local government and media. Small numbers worked for other types of institution, including voluntary and charitable organisations.

Respondents held a range of positions, with analysts or associates, academics and managers particularly strongly represented. They tended to be highly qualified: around a third held a doctoral degree and half of the sample held a Masters' degree as their highest educational qualification.

The focus group participants were recruited from survey respondents, as well as from additional identified users. A total of 49 people took part in the focus groups between July and September 2017. Due to its qualitative nature, the value of the findings is its ability to provide insight into a broad range and diversity of views and experiences of users of ONS economic statistics. But these may not necessarily reflect the views of the wider population. The findings should be considered within the context of these strengths and limitations.

This project was commissioned by the ONS as part of a series of projects carried out by ESCoE in its first year of operation. The principal aim of the research was to provide indicative evidence on the value of ONS economic statistics to society. A second aim was to explore the potential of areas of investigation recommended by the UN Economic Commission for Europe (UNECE) Taskforce relating to how official statistics are valued.² The issues addressed by the research included how economic statistics are accessed and used and the extent to which they meet users' needs and how their value might be conceptualised both to users, their organisations and more widely.

The statistics of interest to the research are those in the economic statistics series. These can be grouped as follows:

- Industry and business statistics
- International trade and balance of payments
- Public sector finance
- Productivity
- Inflation and price indices

² <https://www.unece.org/statistics/statstos/task-force-on-the-value-of-official-statistics.html>

- GDP and national accounts
- Regional and local economic statistics
- Employment, wages and labour market

The project is in two stages: a baseline carried out in 2017 and a follow-up study in 2020, aimed at establishing the impact of the changes introduced by the ONS in the intervening period and also to use survey questions recommended by UNECE, in order to explore further the development of a measure of monetary value of the statistics. This report presents the initial findings of the baseline study.

Research methods

Two research methods were used: a survey of users of economic statistics, and focus groups with survey respondents and additional users. We developed an online survey which we sent out to possible users of ONS economic statistics. Our survey methods and the sample are described below.

The survey: purpose, response and sample characteristics

The survey and focus groups were carried out to assess the needs, expectations and satisfaction in service provision of users of official economic statistics, with the survey providing an overall picture of their use by types of user and statistics accessed. One of the primary aims of the survey was to use the survey questions recommended by the UNECE to measure the value of official statistics. This was the first time the UNECE questions were piloted in a UK context and with a focus on economic statistics. In particular, it aimed to pilot the use of questions about how the value of economic statistics might be measured by frequent and high-level users. As such, the survey was not intended to be representative of all economics statistics users but to gather data on the use of these statistics by a particular group and to explore their perspectives in more depth in focus groups.

The survey was distributed by email and online over a period of 3 weeks, between 14 June and 6 July 2017. There were a total of 254 responses. Of these, 218 responses had fully completed the survey and were included in our analysis. The 36 partial responses were excluded from our analysis.

The majority of responses were achieved through an email invitation (79%), sent via various ONS email distribution lists as well as relevant NIESR distribution lists. In total, the survey was sent to 1,651 unique email addresses. The first email was sent on 14 June, with reminders issued on 26 June and 3 July, respectively. In addition, throughout the period, respondents were recruited via Twitter and through postings on the ONS and ESCoE websites. We also asked contacts in the Royal Statistics Society (RSS) and the Royal Economics Society (RES) to forward the invitation to their members.

We faced significant time constraints in the collection of data for this project, so we followed a non-probability sampling method aimed at maximising the number of respondents across a range of user groups, rather than ensuring representativeness to the wider user population or within subgroups. As such, the following analysis does not claim to make any generalisations to the wider population of ONS economic statistics users or any subgroup analysis, since numbers are too small to be reliable. Rather, in conjunction with the focus group findings, our analysis will identify and discuss common themes.

Appendix 1 shows detailed tables and figures, outlining the characteristics of respondents in the final sample by age, gender, level of education, sector and industries. It shows that the sample is distributed across age groups, though concentrated in ages 25 to 54. The gender distribution is skewed towards male respondents who account for around three quarters of the sample. Female respondents account for around a quarter of the sample. In terms of industries, the largest group in the sample is academics (34%), followed by central government departments (18%), private sector (15%), public organisations (9%) and local/regional government departments (7%).

Survey respondents tend to be highly qualified, with around a third of respondents having completed a doctoral degree and around half of the sample had obtained a Master's degree.

Focus groups: Purpose, recruitment and sample

The purpose of the focus groups was to explore in more detail how users of ONS economic statistics assess and use them in the course of their work. This includes how users access the statistics, how well the statistics meet their needs and how outputs and decision-making could be improved through changes to the statistics. The focus groups also explored the question of the monetary and wider value of economic statistics. A semi-structured topic guide was used in all focus groups and is included in the report appendix.

Focus group participants were recruited mainly through inviting survey respondents, through snowballing and additionally through identifying other similar users. The survey included a final question on whether the respondent would be willing to take part in a focus group to which around 41% said they would, equal to 90 respondents. Overall, the invitation was sent to around 100 people who were all encouraged to forward the invitation to relevant colleagues.

We carried out a total of 9 focus groups. This included two focus groups at the Bank of England, of both employees and some external members of the Monetary Policy Committee. We also held four at NIESR, grouped into type of users: policy makers in central and local government; finance specialists; academics, economic forecasters and researchers; and a mixed group including consultants. We then held three mixed-profession regional focus groups in Wales, Scotland and Northern Ireland. A total of 49 people took part in the focus groups which took place between July 2017 and March 2018.

Due to its qualitative nature, the value of the focus group findings is its ability to provide insight into a broad range of views and experiences of users of ONS economic statistics. Therefore, while the research shows the range and diversity of views and experiences, they may not necessarily reflect the views of the wider population. In particular it should be recognised that focus group participants were generally high level and very frequent users of ONS economic statistics. The findings should be considered within the context of its strengths and limitations.

Structure of the report

We have described the background to the research and methods used in this Section. We present the findings in Sections 2 to 6. Section 2 describes the use made of economic statistics by the range of research participants and Section 3 looks at the purposes for which economic

statistics are used. Section 4 looks at issues of access and Section 5 at issues of satisfaction. The final section explores the question of the how the value of economic statistics might be measured. Section 7 ~~brings~~ identifies ~~some~~ key points and draws ~~some~~ conclusions. Each Section includes findings from the survey, closed and open questions, and the focus groups. While ideally we would have integrated them into a fully thematic analysis, as a baseline study we have purposefully kept some separation to assist comparisons at the follow-up stage. Our main findings and conclusions are, of course, drawn from all stages of the research.

2. Use of ONS economic statistics

Summary

Survey respondents and focus group participants used ONS economic statistics regularly, and made particular use of series on industry and business, GDP and national accounts and employment, wages and the labour market.

One in four survey respondents used ONS economic statistics daily and a further 31 per cent used them weekly.

These characteristics indicate that our survey findings reflect the views and experiences of regular, rather than occasional, users of ONS economic statistics.

Survey responses

The survey began with a question about what types of ONS economic statistics the respondent had used during the last 12 months. Figure 1 on the following page shows that the respondents use a wide range of ONS economic statistics. In particular, around three-quarters of respondents had used 'GDP and national accounts' and 'employment, wages and labour market' statistics in the last year. Only 3% of respondents had not used any ONS economic statistics in the last 12 months.

Survey respondents were asked two questions about their frequency of use. Figure 2 shows that around 67 percent of the sample had used ONS economic statistics within the last week. Only 22 percent had used it a month or longer ago.

Respondents who had used ONS economic statistics more than a month ago were asked a follow-up question on the reason for this. Most answered that they had 'had no need for any ONS economic statistics' in the given time period. Several academics pointed out in open-text answers that there was a time-of-year affect, as they were busy marking exam papers rather than conducting research during the period the survey was taken.

Another question asked more generally about how frequently respondents usually used ONS economic statistics. The results are shown in Figure 3, which again demonstrates that the survey sample comprise predominantly regular users. One in four used ONS economic statistics daily and a further 31 per cent used them weekly.

Figure 1. Use of ONS economic statistics in the last 12 months

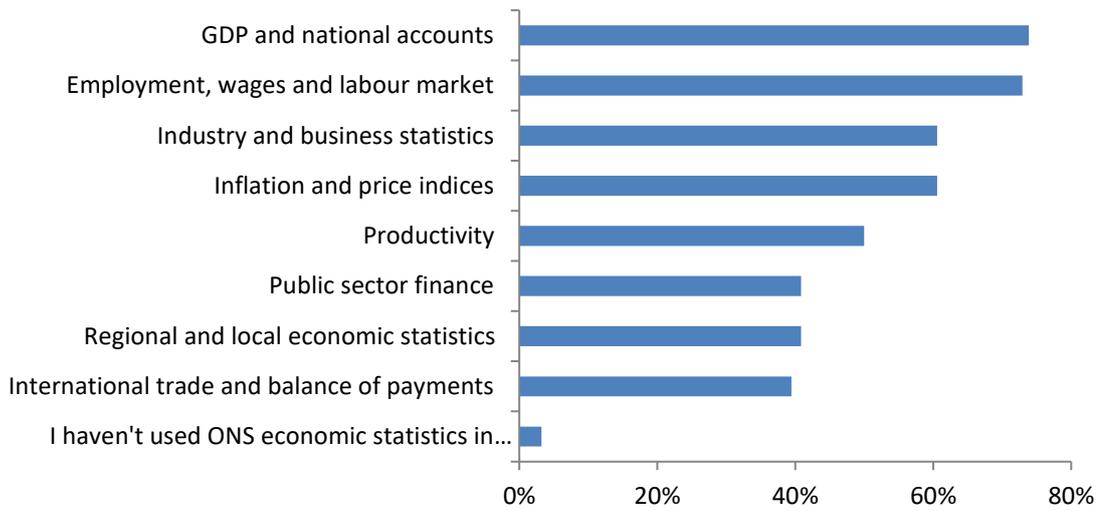


Figure 2. Last use of ONS economic statistics

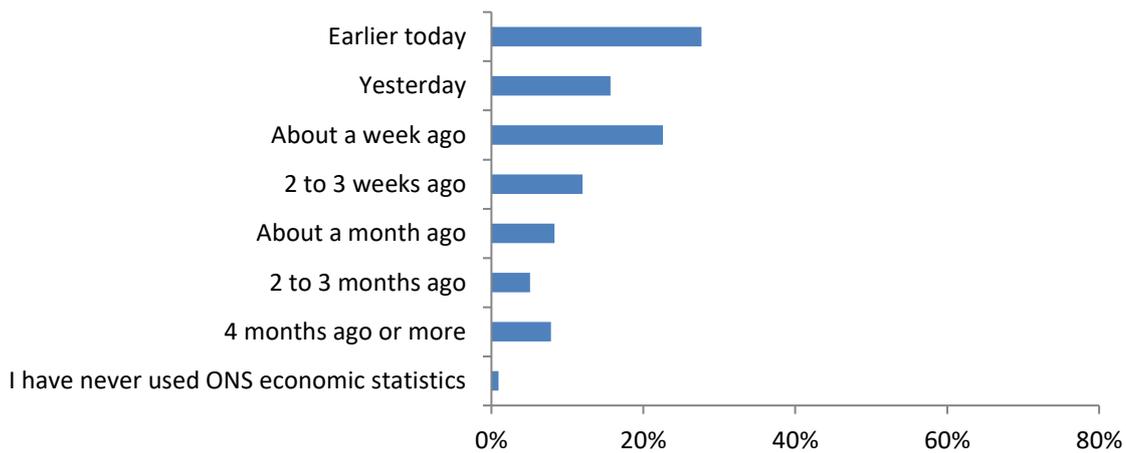
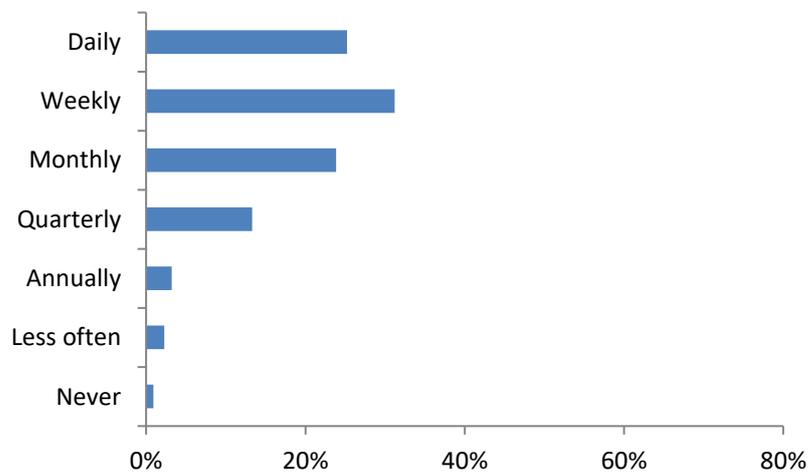


Figure 3. Usual frequency of use of ONS economic statistics



Focus group findings

Focus group participants were also asked about their use of specific ONS economic statistics. Across all participants, the statistics used most commonly reflected the survey findings, with GDP and national accounts data, industry and business and employment, wages and labour market frequently mentioned. Particular databases used by a range of participants include the ONS dataset BRES (Business Register and Employment Survey) and FAME (Forecasting Analysis and Modelling Environment) which is a commercially available dataset based on ONS data.

Focus group participants' use of statistics varied according to their profession and role within their organisation. This is described below.

Economic forecasting

The focus groups included many who used economic statistics for forecasting, including within the Bank of England, NIESR and the Office of Budget Responsibility (OBR). GDP and national accounts data were series most commonly referred to for such purposes. Participants at the Bank of England also made frequent use of data on international trade and balance of payments. Economists estimating GDP made use of industries' data, including monthly industrial production and retail sales data. This range of statistics was also used extensively by Government departments.

Other finance sector participants said they used a wide range of statistics including GDP and productivity, again often for forecasting purposes. Their focus tended to be more on macroeconomic than regional level. One participant from an international bank explained that they used statistics which would help communicate expectations on future Bank of England monetary policy. As well as analysing macroeconomic data, this also involved delving deeper into the data to identify trends of interest for wider dissemination:

‘Sometimes it can be my role to look beneath the macro aggregates and to see if we can explain if there’s any funnies of one offs that are explaining odd numbers at the macro level.... Increasingly, in the internet age we’re looking for that killer stat which will get you the line in the press (Economist, private sector).

Focus group participants from Government departments also made use of investment statistics, a sub-set of GDP and national accounts.

Use by academic and policy researchers

Academics used statistics for a range of purposes, including for forecasting and for teaching. GDP growth and inflation were used for these purposes. As we describe below, they also used regional data for specific research projects. Academic and policy researchers also used micro data accessed via the ONS, for example the Annual Survey of Hours and Earnings (ASHE) as well as using data from tables published on the ONS website. An example given by one researcher was the use of micro-level data from ASHE for a study on performance pay. Such users also frequently contextualised research findings with ONS data.

Participants working as sector or industry advisers or in a consultancy role used a wide range of statistics to assess economic performance in terms of production, exports, trade and other factors. Regional statistics were also used for this purpose, particularly for sectors with a

specific geographic concentration. These participants also made use of wage statistics. A trustee of pension funds made extensive use of Retail Price Index data.

Use of regional statistics

Focus groups included users in local authorities and other local organisations who used a wide range of economic statistics for their work on business and skill development and support as well as labour markets and housing. They also made frequent use of statistics in public sector finance. These users accessed data at a regional and sub-regional level to a greater extent than other focus group participants. Like others, they carried out forecasting, but for their localities and regions rather than at national level. This included, for example, population projections to assess housing needs. These users also used statistics on productivity and on job growth to examine movements at regional level. Other users of regional data tended to be academics and researchers who accessed them for specific projects. The statistics most commonly used included those on housing and labour markets. The regional data service NOMIS was also used extensively by users requiring regional labour market statistics. While ONS statistics did meet needs for regional and local data to an extent, users also accessed other sources to obtain a more detailed picture of their area, for example in relation to local economic activity.

3. Purposes for which ONS economic statistics are used

Summary

Survey responses show the value of economic statistics for research, with nearly three-quarters of respondents saying they use them for this purpose.

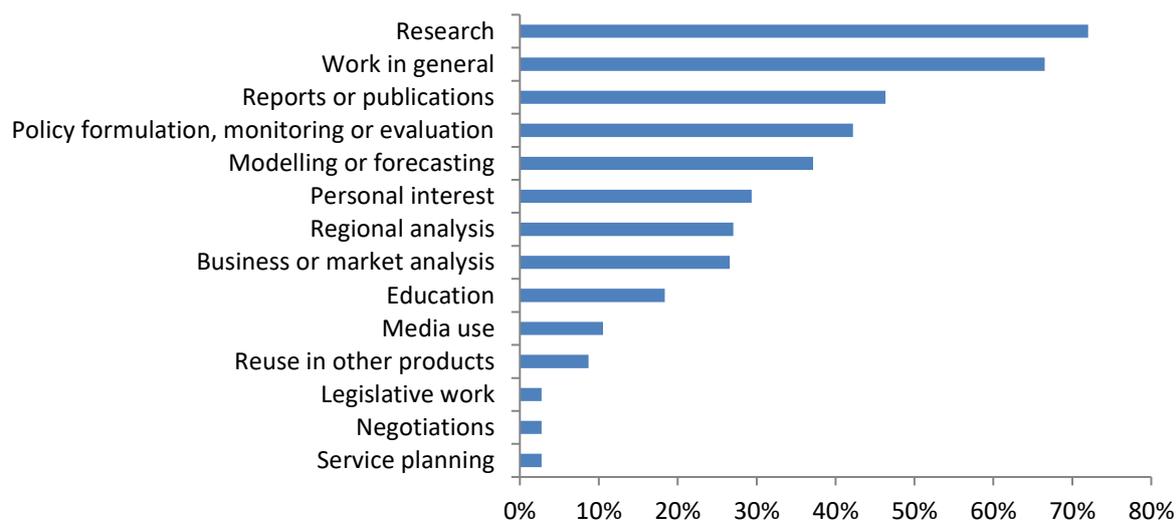
Other purposes for which respondents use ONS economic statistics include reports and publications, modelling and forecasting, policy formation, monitoring or evaluation, teaching, business, market or regional analysis.

ONS economic statistics were seen as essential or important for these specific purposes and for work in general.

Survey responses

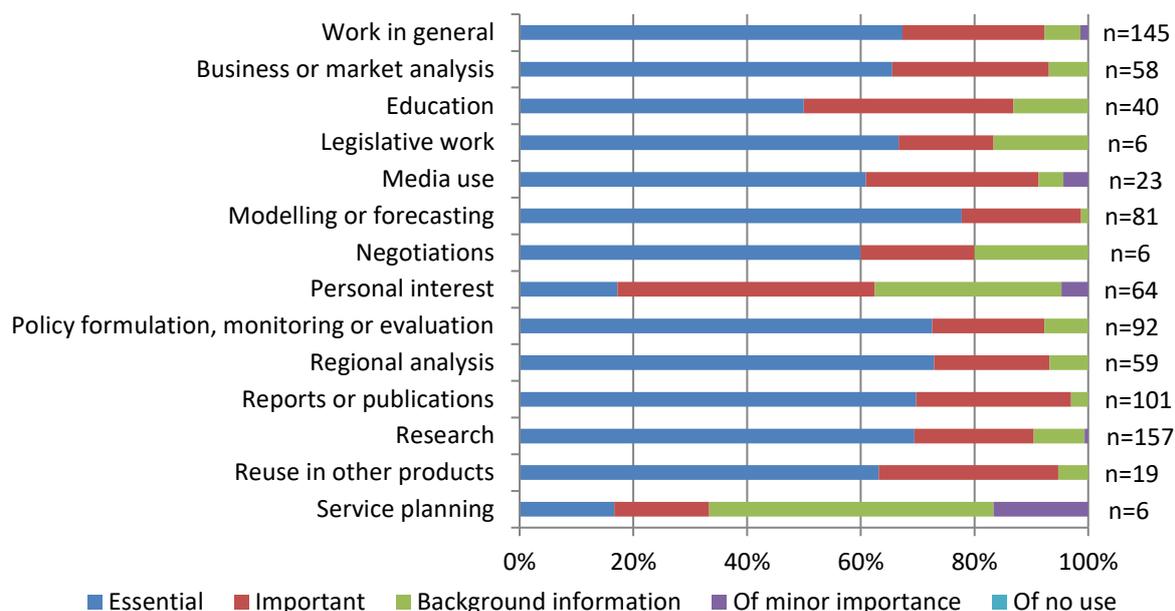
The survey explored the purposes for which respondents use ONS economic statistics (Figure 4). The most common responses were research (72%), work in general (67%), reports and publications (46%) policy formulation, monitoring and evaluation (42%) and modelling and forecasting (37%).

Figure 4. Purposes for using ONS economic statistics (select all that apply)



The survey also asked respondents to rate the importance of ONS economic statistics for each of the specific purposes they stated. The number of responses is included in Figure 5 below to signpost the small sample sizes for many of these categories. Overall, however, it is clear that for survey participants, ONS economic statistics were essential for their work.

Figure 5. Importance of ONS economic statistics for specific purposes



Focus group findings

We also asked focus group participants about the purposes for which they use ONS economic statistics and the outputs produced. As we discussed above, a sizeable number of focus group participants used economic statistics for forecasting and produced results in the form of reports and briefing documents. End users of these outputs include ministers and other politicians, policy makers and academics, journalists and think tanks. Users in the field of academic and policy research also produced outputs in the form of reports and papers, accessed by a range of audiences.

Finance sector participants also produced regular outputs timed to statistical releases. As well as regular outputs, many users produced ad-hoc analyses on particular economic issues either for specific users or for a wider audience. Other respondents, including those in the regional focus groups in Scotland, Wales and Northern Ireland, produced regular economic reports, for example on their industry sector or, in the case of local authorities, their regional economy. Users of these locally produced outputs include residents as well as businesses and education and skills providers. Other outputs, from consultants and academics included papers, monographs and teaching materials. Journalists also made use of a range of statistics for press, broadcast and on-line media stories.

4. Accessing ONS economic statistics

Summary

Participants largely used the ONS website directly to access economic statistics. Reflecting this, survey and focus group participants commented widely on the website and its design and functionality for their purposes. The majority of issues raised are already known to ONS and the findings from this research have been collated to feed directly into the ONS Website Redevelopment Plan. They have been collated into a specific summary at the end of this chapter.

Respondents also reported positive experiences of contacting ONS staff, which could potentially be further improved through the creation of a statistics enquiry line.

Survey responses

The survey asked a number of questions about accessing ONS economic statistics. The findings are shown in the graphs on the following page.

Asked to select their 1-3 most usual access points to ONS economic statistics, Figure 6 shows that most survey respondents (above 90%) accessed economic statistics via the ONS website, 42% via the statistical releases and 25% via publications.

Figure 7 shows that respondents are alerted to ONS economic statistics through a wide variety of mechanisms. The most commonly used alerts were the ONS website (50%), the ONS release calendar (37%) and printed, online and broadcast press (30%).

We also asked survey participants whether they made contact with the ONS via telephone or email. Figure 8 shows that around half of respondents never or very rarely contact the ONS by phone or email. However, there were also a number of respondents who contacted the ONS more frequently. In total, 40% responded they contacted the ONS either quarterly or more often.

Figure 6. Usual access to ONS economic statistics and information (1-3 options)

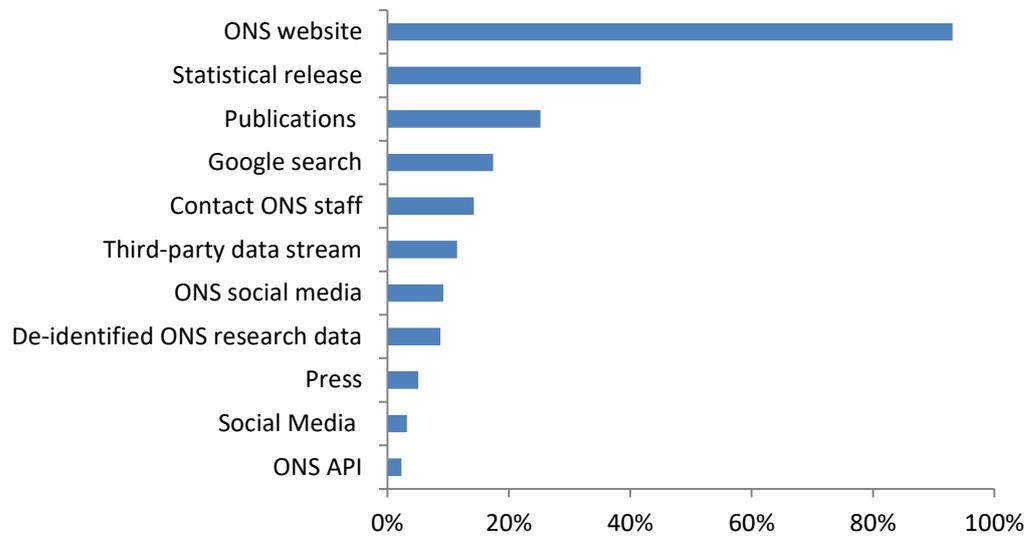


Figure 7. Alerts to latest ONS economic statistics (select all that apply)

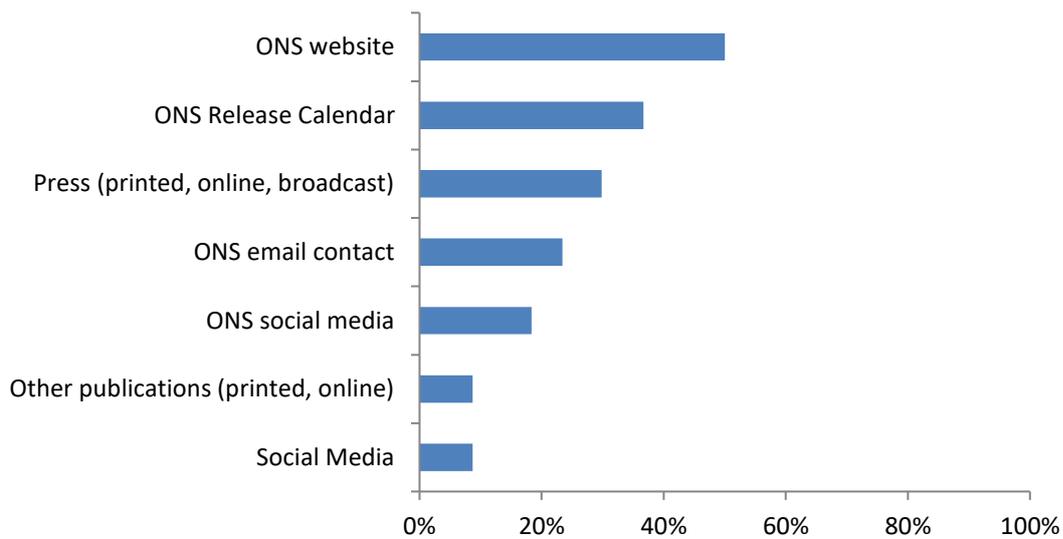
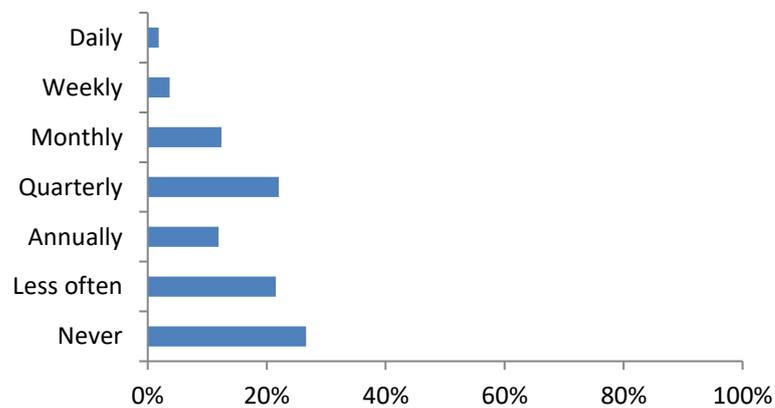


Figure 8. Frequency of contacting ONS about economic statistics (e.g. phone, email)



Focus groups

We also asked focus group participants how they usually access ONS economic statistics. Larger institutions including the Bank of England, HMT and OBR have a service from ONS which enables them to download the full series of economic statistics into their own databases. A number of participants accessed economic statistics via this route at least initially. The formatting of these databases generally met their needs, as they are designed for their own purposes. Some participants accessed ONS statistical data through databases on a subscription basis, which included international as well as national series. Some smaller organisations, for example local authorities, received bespoke statistics on a regular basis and seemed satisfied with the service they received.

Other comments concerned the presentation of data rather than website functionality. A common remark was the size and cumbersome nature of some spreadsheets in the economics data series. Large spreadsheets of many columns make it difficult to identify and manipulate the data. Another common difficulty was experienced in accessing time-series and also in downloading spreadsheets across series and putting together figures.

Some data series were found to be difficult to use directly from the site as they were most often published as vast spreadsheets. These were regarded as 'brilliantly formatted' for infrequent users or to understand the data, but it was not machine-readable in the sense that it required quite a bit of manual human intervention to transfer into a format that could be put into an analytical programme. For this reason a number of participants used databases such as FAME from an external download rather than on the ONS site. One participant commented that he imagined that the formatting style would be a hindrance when regularly updating forecasts. At the same time, other participants said this was not an issue for them since they liked to view data in a visually clear format and found the presentation of the statistics they were interested in met this need.

A particular issue was identified by some users in access to vintage data. A number of respondents felt inconvenienced by 'over-writing' of earlier sets of data in series they accessed.

While many participants were aware of the release dates of new ONS economic statistics, others were less so and found the email prompts useful in alerting them to upcoming releases. However, these were reported to be sent either on the release day, or the day before, and it was agreed that more notice of publication would be useful. One participant informed the rest of the group that users can sign up for regular emails from the media team of next weeks' releases, and it was agreed that while journalists might be aware of this service, other users may not. Email alerts were also valued for their links to the precise location of data of interest, particularly by respondents who experienced difficulty finding the statistics they wanted.

Contact by telephone or email

Focus group participants also discussed their experience of contacting the ONS via telephone or email. They were aware of the service ONS provides through these communications routes. Emails can be sent from links to named contacts, but these were found to sometimes be groups rather than individual staff, leading users unsure they had reached someone who

could help. However, in general, participants reported positive experiences of these forms of contact, commenting particularly on improvements in this area. One participant remarked:

‘I think individual accountability is much stronger than it was when I started out as well. So if I need to speak to somebody about a data item occasionally, I can actually find a name and they’re very responsive. So the personal interaction I think has probably improved’ (Economist, finance sector).

However, experiences with email correspondence did vary, with some participants reporting delayed responses and having to send reminders. This was thought to be explained by responsiveness of individual ONS staff rather than by technical or organisational factors. At the same time, some respondents agreed that an urgent request usually received a reasonably prompt reply. Similarly with ‘phone numbers, users found that the number given for a named individual routed to the ONS switchboard, because of absence, and an alternative contact was not always readily identified. One suggestion was that the ONS introduce a statistics inquiry line separate from its main switchboard to more accurately route calls to the appropriate team. A problem was also reported where users had queries which cut across statistical series and relate to inter-connected data. In such cases it could be difficult to identify the appropriate individual with an overview of data rather than detailed, specialist knowledge. One suggestion was that the ONS provides access to broader advice across statistical series, as well as the specialist service already provided.

Focus group participants were asked whether they access ONS economic statistics through social media, in particular Twitter and Facebook. Some had little awareness of the ONS’s social media outputs since they were not users of such forms of communication themselves. However, in one focus group the view was expressed that social media will become a more important form of communication and that the ONS should increase this activity. This was particularly in view of the need to engage younger users of economic, and other, statistics. It was also considered important to counter ‘fake news’ and scepticism about experts.

Finally, a small number of participants had attended an ONS forum and had found these a very useful way to learn about economic statistics which they had not used.

The ONS website

The website was a subject which arose throughout the research. It came up in both the survey and focus groups where respondents reported extensively on their experiences of using the website, particularly issues around access to statistics and navigation of the site to find these and other information. Many of the issues raised are already known by ONS. The comments and issues raised by the research and reported here have been collated and will feed directly into the ONS Website Redevelopment Plan. In this section we summarise findings from all stages of the research which relate to the website.

Accessibility

Participants expressed a range of views on the ease or difficulty of accessing economic statistics using the ONS site. Whilst many acknowledged that the website and search function had improved in recent years, there was general agreement that the economic statistics series and data could be structured in a more intuitive way. Those who were familiar with the series

they used found they could access them relatively easily but others had difficulty either finding new statistics or returning to statistics they regularly used.

One of the main issues was the search engine. It was reported to be hard to use, producing too many results and leading users to search via Google instead. It was also suggested that the economic statistics series and data could be structured in a more intuitive way, with better contents pages at the start of each series and more summary charts. Another suggestion was to include more explanation of methodologies and definitions of economic concepts.

Some respondents reported non-intuitive categorisations within the economic statistics series. As one respondent explained:

‘The ONS has a particular hierarchy, which I can understand why they put it under that one, but then if you think about it in some slightly different way it becomes hard to navigate. So I tend just to use Google and that usually gets me a bit closer’ (Economist, government department).

A particular issue was identified by some users in access to vintage data. A number of respondents also felt inconvenienced by ‘over-writing’ of earlier sets of data in series they accessed.

Unavailable data

A few respondents also regretted that some time series and releases were collected, but not made publicly available. Two observations were:

‘There are many series that are collected but not distributed, which we then have to request through FOIs.’ (Manager, private business)

‘ONS are so paranoid about confidentiality that they won’t release even things that are in the public domain from other sources, like SIC codes or data from financial accounts.’ (Analyst, private business)

Provision and presentation of data

Many respondents commented on the way data is provided, with a particular focus on difficulties experienced in downloading data in a useful format, as data series were most often published as extensive spreadsheets. Respondents were not happy at the time they had to spend transposing data to a more useful layout for analysis:

‘I have to do a lot of work to transpose the data from the format given to a spreadsheet I can analyse.’ (Manager, private business)

‘I struggle to customize tables. Eurostat provide in my opinion an excellent interface to extract customised information. NOMIS is also good, though more clunky.’ (Academic)

Participants also suggested specific improvements:

- ‘Create a data download facility where all economic data of the same frequency can be downloaded at the same time. Further integration with Excel to allow dynamic updates

without needing to access the ONS website further would increase productivity.’
(Manager, trade association)

- ‘Improve availability in suitable form for students and researchers. See the World Bank Global Financial Development Database as a model.’ (Academic)
- ‘A service similar to the bulk download facilities available for the IMF datasets would be of great interest.’ (Academic)
- ‘Move to the delivery of all series and datasets via API or identical format file download.’ (Manager, trade association)
- ‘The more data that can be available via NOMIS, the better as this is the most accessible platform for querying data when you need to undertake area-specific studies.’ (Academic)

There was also a call for the ONS to make microdata more readily available, easier to use and better described. One respondent requested a section on the website dedicated only to providing access to raw datasets ‘without any of the interpretations and analysis’. A specific point from one respondent was the need to consider carefully the ‘release protocols for microdata to facilitate UK participation in cross country microdata analysis.’

Another theme identified in all the focus groups was the need for the website to cater better to different user groups: economists and analysts, students, journalists and the general public were just three groups seen to have very different needs. Others made the same point slightly differently, identifying a need to distinguish between different levels of use; it was felt that the ONS website caters much better for either occasional or intense users than ‘intermediate’ ones.

5. Satisfaction and improving ONS economic statistics

Summary

Most respondents expressed satisfaction with the statistics themselves, especially in terms of their trustworthiness and freedom from political interference.

The research findings suggest that improvements could be made to the provision of regional and local economic statistics, international trade and balance of payments and productivity. Respondents identified gaps in the data arising from changes to the economy, for example detailed data on the service sector and data on the digital economy and new forms of employment.

Many respondents were of the view that the ONS should improve its metadata and methodological documentation in terms of its detail and quality. Focus group participants identified a need for standardised descriptions of key economic concepts, for example GDP and productivity.

Divergent views were expressed on the role of analysis and commentary and whether this aspect of the ONS's work could be improved. The prevailing view was that the ONS should focus its attention on statistics issues rather than their interpretation. At the same time, some participants felt that the ONS should engage more actively in the public debate to criticise and challenge inappropriate use of economic statistics. It was also seen as important for ONS to be clear about the limitations, and weakness, of statistics, especially very new data which is subject to revisions.

Survey responses

Survey respondents were asked about their satisfaction on a range of indicators and aspects of ONS economic statistics. Figure 9 shows that a very small number of respondents are dissatisfied with the trustworthiness and political independence of ONS economic statistics.

A number of questions were also asked about the quality, accessibility and presentation of ONS economic statistics. Notably, only 6% were 'very satisfied' and 25% were 'satisfied' with how easy it was to find ONS economic statistics. Meanwhile, 42% of respondents expressed some degree of dissatisfaction with this aspect.

For the remaining categories, shown in Figure 10 and 11, the majority of respondents expressed some degree of satisfaction. However, unlike the indicator for trustworthiness and political independence, respondents tend to merely respond 'satisfied' rather than 'very satisfied.'

Survey participants were also asked to what extent they agree or disagree with a number of statements about how ONS performs in relation to ONS economic statistics (Figure 12). Generally, respondents express satisfaction with the performance of ONS economic statistics on the various indicators, most notably on the protection of confidentiality of individual information and ONS' ability to collect and disseminate useful statistics.

Finally, respondents were asked about their degree of satisfaction with specific areas of ONS economic statistics, which is shown in Figure 13. The areas with the highest rates of

satisfaction are 'employment, wages and labour market', 'inflation and price indices', and 'GDP and national accounts'.

At the other side of the spectrum, the categories where most respondents expressed some degree of dissatisfaction were 'regional and local economic statistics' (18%), 'international trade and balance of payments' (15%) and productivity (14%). However, even for these categories, most respondents expressed satisfaction.

Figure 9. Trust and political interference

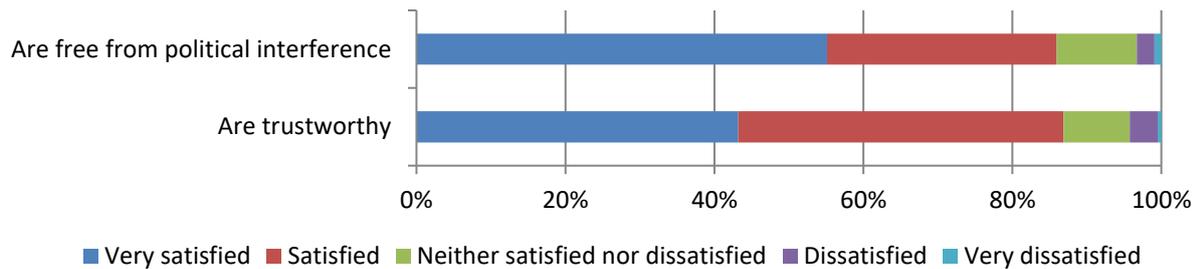


Figure 10. Quality, accessibility, presentation

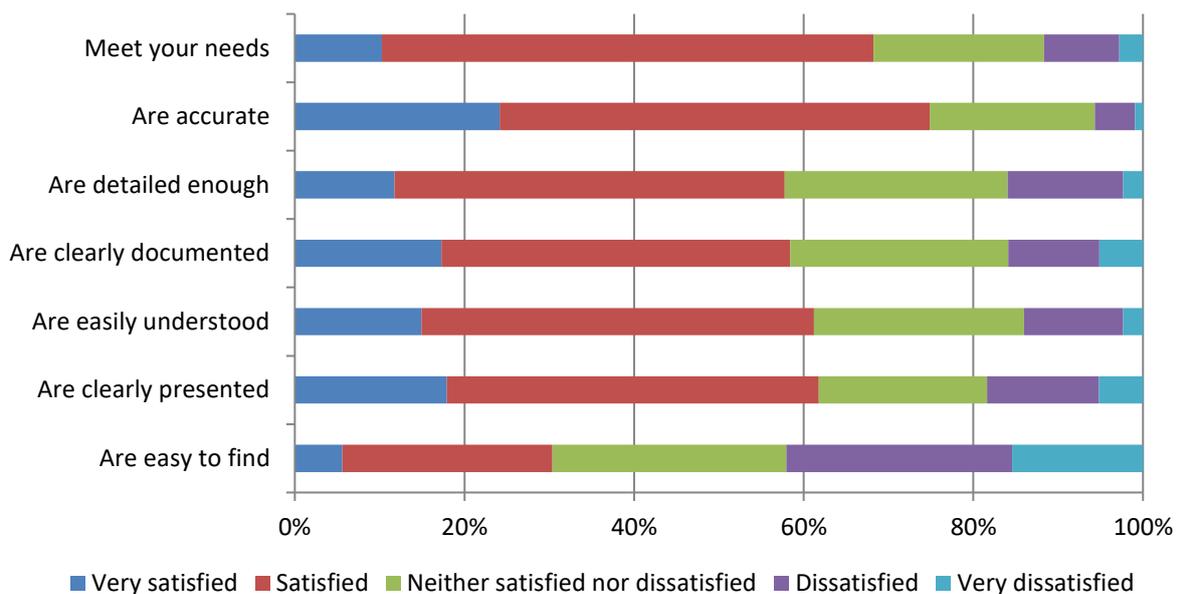


Figure 11. Frequency and timeliness

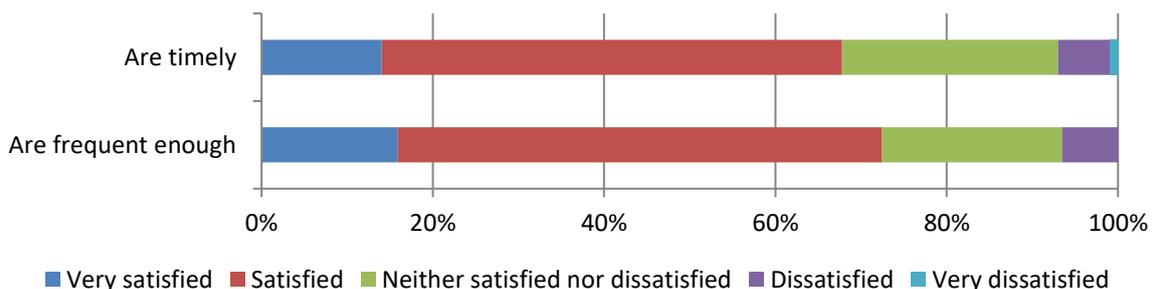


Figure 12. To what extent do you agree or disagree that the ONS...

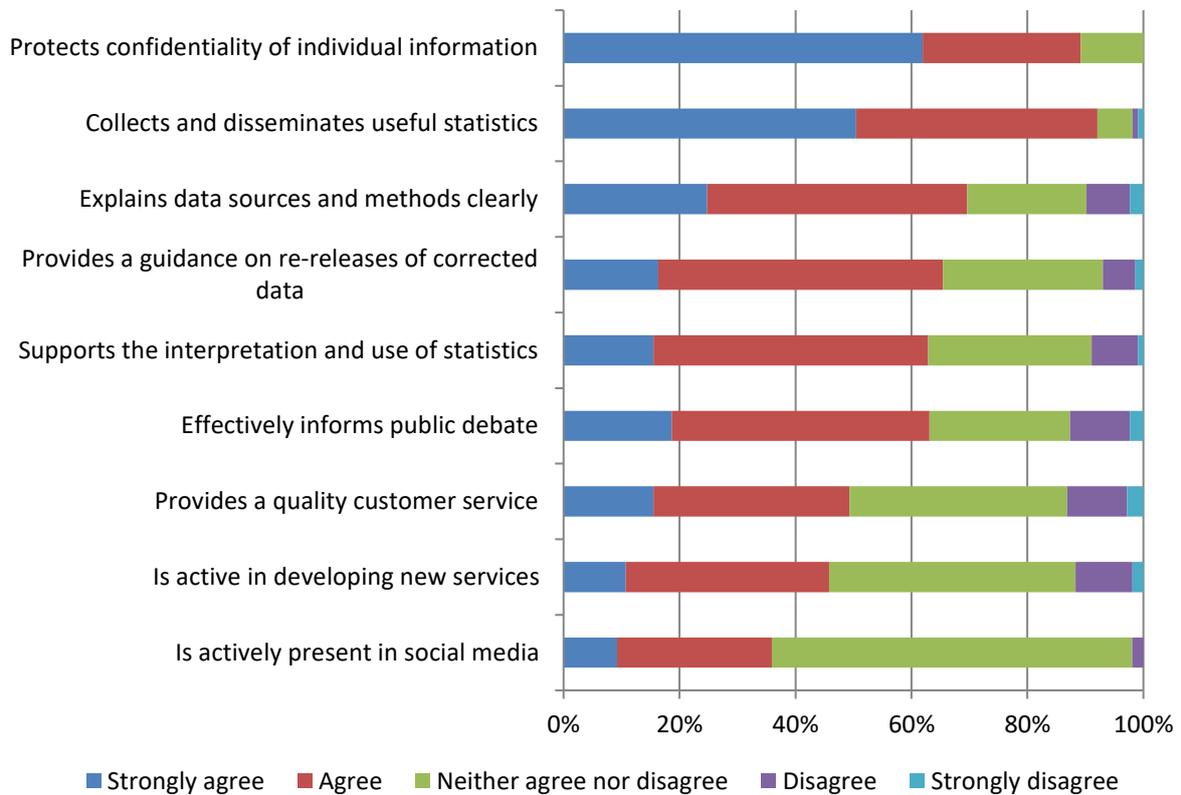
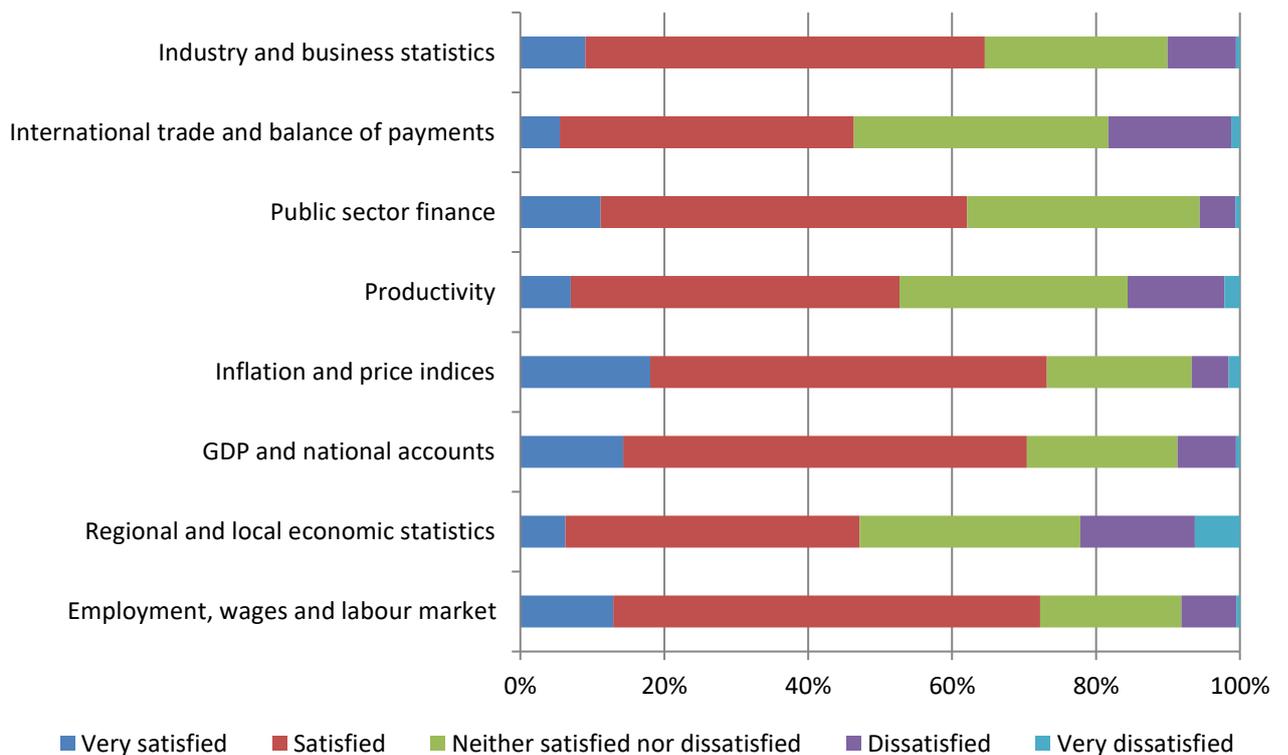


Figure 13. Satisfaction with specific areas of economic statistics (Don't knows excluded)



Open-ended survey responses

The survey asked open-ended questions about the performance and improvements of ONS economic statistics. The survey sample elicited 138 open-ended responses to the question ‘what do you think the ONS is doing well regarding its economic statistics?’ and 158 responses to the question ‘what do you think the ONS could do better regarding economic statistics?’ The responses have been coded and analysed, and the findings are presented below.

Like the focus group findings, the strength of this analysis is its ability to provide insights into a broad range of views and experiences of users of ONS economic statistics, rather than reflecting the views of the wider population. The findings should be considered within the context of these strengths and limitations.

What the ONS is doing well (open-ended survey)

Quality

Many respondents noted the general strength of the ONS as a provider of official statistics and as an invaluable source of data collection and dissemination on matters relating to the UK economy. In particular, respondents praised the breadth of ONS economic statistics:

‘Compared to sources of corresponding information in other countries, the ONS does well in comprehensiveness’ (Private user, retired).

Respondents emphasised that the available statistics were ‘sufficiently comprehensive for informed decision-making’ and that ‘ONS data covered most of the topics relevant for economic research.’ Another respondent also noted that, ‘given its resources’, the ONS published a ‘very extensive amount of statistics.’ In addition, a large number of respondents praised the ‘timely’, ‘regular’ and ‘frequent’ releases of data. In relation to the timeliness of statistics, many respondents also praised the reliability of the ONS publication schedule.

Respondents also praised the accuracy of ONS economic statistics, with a few comments acknowledging the trade-off between accuracy and timeliness, and they indicated satisfaction with how ONS struck that balance. As one respondent said:

‘Acceptably accurate numbers are produced to timetable.’ (Analyst, Private business)

Methodology and commentary

The question about possible improvements to ONS economic statistics elicited more responses regarding methodology and commentary, which will be covered in the next section. However, there were some general comments about the strength of methodological descriptions, for example:

‘The statistical bulletins contain helpful information in interpreting the data, accessing methodology, explaining outliers, and announcing upcoming and implemented changes to the data set. Providing this type of information is very helpful.’ (Manager, private business)

There were also a few remarks on the increasing use of analysis and commentary, which was described as 'useful' and 'helpful' by some respondents, but again this will be discussed further in the section on improvements.

Informing and supporting users

A large number of respondents expressed the view that the ONS did well in supporting user queries and requests, emphasising ONS staff's 'responsiveness', 'proactive user engagement' and 'help with accessing and using data'. Respondents variously commented:

'The ONS is always open and ready to help with any queries about their datasets.' (Academic)

'ONS has worked closely with my team to help us use the data to produce results relevant to our work. We have found them extremely helpful and willing to spend time with us.' (Civil servant)

'Their customer service is really good. My questions are always answered promptly and in detail' (Academic)

'Staff, when contacted, are invariably knowledgably and very helpful.' (Manager, regional government)

A number of respondents had noticed improvements in this area, for example:

'Engagement with external users has also improved greatly, and is something that the ONS should maintain a focus on.' (Analyst, trade association)

'Staff are much more approachable than they used to be.' (Manager, private business)

Trust

A number of respondents also focused on ONS as a reliable, trustful and independent source of government statistics. Respondents emphasised that ONS had maintained its impartiality, integrity and independence from political interference, some noting that this had been achieved in what they saw as a challenging political environment:

'Avoiding distorting political influence.' (Academic)

'Trying to stand up to politicians.' (Academic)

'I think the ONS is honourable in a very difficult political climate.' (Journalist)

'Making progress with not giving government ministers early sight of data ahead of other users.' (Journalist)

Public good

Some respondents expressed appreciation for ONS economic statistics as a public good that is freely and publicly accessible for businesses, households and decision-makers. For example:

‘I really appreciate this data being available. I see it as a public good as it helps with education and helps businesses and households make informed decisions.’ (Analyst, private business)

Respondents also valued the availability of data that is continuous and comparable over time in a consistent way, for enabling longitudinal analysis of trends over time. For example, one respondent commented:

‘Time series that use comparable data are especially useful, and they note breaks in series.’ (Academic)

Some also noted ONS’ importance in driving and informing the public debate by providing data to newspapers and other media. Some respondents noted that communication with the public had improved, with particular focus on ONS’ performance on social media and theme days. Comments included:

‘Very good at disseminating through social media.’ (Academic)

‘Well communicated, much improved social media and digital presence, and additional clarity from theme days.’ (Civil servant)

Innovation

A number of respondents also expressed encouragement that ONS looked to innovate and invest in new methods including making digital improvements.

‘I am encouraged by the new investment in statistics following the Bean Review, but wait to see the fruits of it before making a judgement.’ (Manager, public organisation)

‘I have been impressed with the way ONS is actively looking to improve its working practices and statistics offers for the changing needs of users and the changing economic/business environment.’ (Civil servant)

What the ONS could do better regarding economic statistics (open-ended survey)

Website and accessibility of data

The majority of respondents, to this question, commented on issues relating to the ONS website and accessibility of data. These comments have been fed directly into the ONS Website Redevelopment Plan. A brief summary can be found in Chapter 4.

Quality

Respondents commented on the quality, level of detail and regularity of ONS economic statistics. Particular focus was on the granularity of economic statistics. Respondents especially recommended improving granularity in the services sector statistics and regional data.

Methodology and metadata

A large number of respondents said that ONS should improve its metadata and methodological documentation. Whilst a number of respondents said the ease of access to

metadata should be improved, most of the responses centred on the need to improve the detail and quality of documentation. More specific comments included:

- ‘It could explain variables better, especially in terms of units.’ (Academic)
- ‘Sometimes methodologies are very short and should be extended to really understand what the ONS has done with the data (e.g. human capital stock formation).’ (Academic)
- ‘Metadata are poor. For example, if I want to understand what’s in a series in the UK economic accounts, I have to refer to a handbook that was released in 1997. And even that doesn’t really explain the assumptions and sources that go into each series.’ (Manager, public organisation)
- ‘Changes in data collection methodologies and/or presentation of data can be better documented. Especially for long-running series such as the QLFS. (Academic)
- ‘ONS published many formats and releases for the same concept and on occasion there are discrepancies in data and labelling of time series between various files. This creates confusion about what the correct values and definitions for concepts are.’ (Manager, private business)
- ‘Make it more transparent when modelled data are used in bulletins and when actual data are used.’ (Manager, regional government)
- ‘Make clear how far data are the result of modelling/apportionment rather than statistical observations at the level of granularity presented.’ (Manager, regional government)

In addition, a number of respondents said there needs to be ‘greater clarity to the lay person’ in the documentation and methodological descriptions, particularly concerning what the statistics represent and how they should be used and interpreted. For example, one respondent said that colleagues sometimes used the wrong ONS data sources, which ‘could be avoided with clearer instructions’. Another noted that ‘the implications of using imputed rents and ‘financial intermediation services indirectly measured’ (FISIM) may be straightforward for macroeconomists, but could be brought out for lay users.’

Respondents also focused on the process of revising data. In the view of one respondent, ‘staff could be more proactive in spotting methodological problems in data and being open about them.’ Others emphasised the importance of providing transparent guidance on re-releases of corrected data. One respondent recommended that the ONS indicate when errors have been spotted and corrected, arguing that ‘just listing on the webpage of the release requires one to check to see if there have been any corrections.’

Commentary and analysis

A number of respondents provided feedback on the role of analysis and commentary on ONS economic data. Responses divided into two opposing camps: some respondents favoured the provision of more ONS commentary and analysis on topical and policy-related issues to ‘raise the quality of public debate.’ However, many responses were strongly critical of the increased use of commentary and analysis. Many of these respondents argued that the standard of economic analysis fell short of the quality of the collected data. This led some to question whether ONS staff had the required economic proficiency, or were sufficiently aware of the policy agenda or delivery mechanisms. Comments included:

‘There should be less/no commentary and analysis within the ONS. If anything, it is better done by departments who know the policies. Given the quality of the analysis is so poor, there is a danger that it will feed through into a reduction in trust about the (quality of) statistics.’ (Retired, former civil servant)

‘I am sceptical of the value of increased economic interpretation of the statistics by the ONS in their commentaries, which I have found to be of somewhat questionable quality.’ (Manager, public organisation)

Some expressed the view that the ONS should either reduce or stop the amount of commentary, or alternatively invest the required resources in making it more meaningful. One respondent noted:

‘The ONS should either reduce the amount of commenting on data or increase the resources going into it, so that it is more economically meaningful.’ (Manager, public organisation)

A number of respondents recommended that ONS should instead pay more attention to methodological issues, in order to facilitate interpretation of the data:

‘I would prefer a greater focus on statistics issues such as sampling, seasonal adjustments etc.’ (Civil servant)

‘Focus less on economic commentary and more on drawing out statistical issues which would aid data interpretation.’ (Analyst, trade association)

This included the recommendation by some respondents for the ONS to more actively engage in the public debate about how to use official statistics. For instance, respondents encouraged the ONS to:

‘Criticise the misuse of statistics in policy.’ (Civil servant)

‘Challenge inappropriate use.’ (Senior manager, local government)

Regional data

A number of respondents asked for improvements in the detail and frequency of regional economic statistics, which one respondent described as ‘desperately needed’. Other comments on the need to improve regional statistics are listed below:

- ‘Better quality data at a subnational level, particularly city-region level, with more timely and frequent releases (e.g. sub-national GVA is annual and lagged by one year).’
- ‘GVA by LA, please!’
- ‘Boost regional sample size in LFS.’
- ‘Statistics for more indicators (e.g. regional capital formation) are needed.’
- ‘There should be much more cooperation and coordination with regional statistical agencies and more regional output from ONS. Too often Northern Ireland data is not collected for important surveys.’
- ‘The ONS could consider moving away from traditional statistical geographies, such as NUTS regions. As devolved powers increase, the focus and need for good quality timely

data for the devolved administrations will only increase. The current ONS approach, which tend to be to use the same approach across all the NUTS regions, means that good quality data which is only available from the devolved administrations would be overlooked in favour of data which is poorer for the devolved administrations but is available across the UK.'

Data over time

We have described how respondents in the previous section praised the ONS for providing historical time series enabling longitudinal analysis. However, at the same time they had some criticisms and suggestions for improvement. A common concern was the consistency and continuity of data series. Respondents recommended keeping changes to a minimum in order to preserve time-series and paying more attention to producing consistent time series adjusted for discontinuities. One respondent made a point that large datasets suffered from survey samples being changed too frequently:

'Too much weight has been placed on the survey burden on companies, which leads to large changes in time series when the companies sampled are changed. The trust in the quality of economics data would be much improved if larger samples were changes less frequently.' (Manager, trade association)

Informing and supporting users

Comments on ONS staff's responsiveness and usefulness in responding to user queries and requests were more prominent in the section on what ONS has done well. However, a few respondents said there could be more timely responses to emails, a point also made by focus group participants. One survey respondent commented that, while ONS staff were always helpful and enthusiastic, their economic expertise was often 'hit-and-miss' with answers to queries lengthy and lacking clarity. Another respondent recommended a closer cooperation between the ONS and government departments, to support the development of bespoke statistics.

Specific statistics series

Finally, there were a range of respondents who requested the improvement or provision of specific statistical series. The responses are included below in full:

- Improve financial statistics, 'especially gross capital flows are poor'
- Improve flash estimates
- Improve documentation for the national accounts, which 'are not as good as those for inflation and price indices (and less detailed than the equivalents published by the American BEA)'
- Improve the quality of a number of national accounts aggregates
- Improve quality, quantity and detail of service sector data
- Improve earnings data, 'especially for the self-employed it is very weak use of administrative data'
- Improve data on land and land-related economics
- Improve housing data
- Improve the coverage of national public finances and after-tax/benefits equality issues

- Improve business statistics, in particular more focus on large multinationals
- Improve statistics on inflation. 'No one understands the RPI-CPI wedge stuff.'
- Provide more behavioural data
- Provide consistent economic data for pre-1987
- Provide 'some sort of release that tracks GDP in real-time, like the Atlanta Fed GDPNOW index'
- Provide individual data on income, wealth and pensions
- Provide accessible administrative (tax) data
- Provide true monthly labour force set of estimates, should be available as headline number
- Provide a replacement for the Valuation Office statistics
- Collect and provide anonymised and aggregated admin data, to complement most of the data already being collected

Focus group findings: Satisfaction and improving ONS economic statistics

In the light of the survey findings that a relatively low proportion of respondents were very satisfied with ONS statistics, we asked focus group participants how well the statistics in the economic series meet their needs. We asked in particular whether they are sufficiently detailed, clearly documented, frequent enough and whether there are gaps.

Timeliness vs accuracy in economic statistics

One of the main themes of the focus groups was accuracy versus timeliness in economic statistics. Participants valued the frequency and timeliness of the statistics: these were in many cases essential for their work. However, at the same time, it was reported that revisions can make a great difference to decision-making, for example by the Monetary Policy Committee.

There was general unease among focus group participants about the extent to which some data is revised, and the need to sometimes treat some more volatile statistics with caution. The view of one participant reflected a general feeling on this issue:

‘Accuracy is a bit of a bad word to put around statistics because they’ll always be revised as new data comes in. I think they just need to be sufficiently good that they are the best reflection available in a timely way...If they get revised as more data become available over time then they get revised, and that’s the world you live in. You can’t have information immediately. They just need to be good enough and strong enough’
(Economist, public organisation)

It was suggested that the ONS acknowledge when statistics have been revised and provide a history of changes. It was also suggested that the need to treat new data with caution is impressed more strongly on journalists and other commentators.

Many focus group participants were intensive users of ONS economic statistics and wanted data which are reliable, detailed and timely. Some participants said the quality of data in some areas could be improved. There was a view that some areas of microdata in particular are not well documented and as ‘clean’ as they might be and that this generates costs for researchers who have to undertake this work. Another view was that the data should not be ‘over-cleaned’ since users have different purposes.

There was also some discussion about the ONS announcement of a consultation to hear feedback on the proposals to change GDP data releases, particularly the introduction of monthly GDP figures. This move was generally welcomed but with a caveat about accuracy and the need for users, particularly the press, to present them as subject to revision. More generally, participants felt that the balance between accuracy and frequency is a fine one, as one respondent stated:

‘Where they’re relying on surveys there’s bound to be a trade-off..... We welcome getting this data as quickly as possible but recognise there’s a bit of a trade-off with the quality side’ (Economist, public organisation)

It was also suggested that the need for revisions would be reduced if more accuracy were achieved in the data the first time around. This criticism was applied particularly to data on business investment and on trade.

The balance between statistics and commentary

Across focus groups participants raised the question of balance between presentation of the statistics themselves and commentary/interpretation. Some participants, including at very senior level, questioned the balance between commentary on the ONS website and the detail of the statistics themselves. One participant commented 'There's too much economics and not enough statistics.' A number of focus group participants felt that ONS commentaries should be more tentative or cautious about their conclusions. Some senior respondents went further and expressed the view that ONS should leave interpretation of the economics to economists and to external analysts and commentators. One respondent represented others in her view that:

'It's not necessarily [ONS's] job to do the analysis of data. Maybe to explain what the data means, but not the analysis.' (Academic)

This was often a comment on statements in the bulletins since there was also a view that the ONS could provide more of an authoritative statement about what the statistics mean in terms of economic trends. At the same time, there was seen to be a need for commentaries to include guidance on its accuracy and trustworthiness.

The importance of trend data

It was also thought that the ONS places too much emphasis on the latest figures rather than identifying trends, where it was seen to have a clear role. A common view was that interpretation of the statistics was the job of user organisations rather than the ONS itself. This is likely to reflect the fact that many participants were expert users and in organisations which provides such analysis and interpretation. On the positive side, participants found it useful that ONS signposted to further sets of statistics within series on the website. One participant explained that this made her less reliant on google searches for statistics on productivity, for example. Another view was that the bulletin should also include signposting to non-ONS statistics more widely.

Gaps in data

More widely, the economic statistics series was not seen to take sufficient account of changes in the economy such as the growth in digital platforms and new employment models which change the boundaries between the market sector and households. One group referred to the work of Professor Diane Coyle in this regard, but more generally expressed the view that:

'...there's a vibrant research agenda which ultimately has got to inform the statistics.' (Senior civil servant)

Other gaps identified by focus group participants included more detailed data on the service sector, particularly in view of its increasing importance and contribution to productivity. A particular problem was identified in lack of granularity in service sector data. Users also identified a need for more regional data, longitudinal data which allows for distributional analyses. A user of regional data, from a local authority, regretted that some neighbourhood statistics had been taken off the ONS website. This led them to register with the virtual micro-

data library but accessing it directly would be preferable for this particular user. The view of another user on this development was that such statistics are valuable for the analysis of distributional aspects and regional issues, including around welfare, and that they should have been retained on the website.

Participants in regional focus groups identified gaps in detail in relation to regional and local data. Respondents in Wales had found regional GVA data very useful but ~~that it~~ more frequent updates are needed for it to be used effectively. More generally, users of regional data said that both the detail and timeliness of statistics was important to them, and increasingly so in the light of devolved powers. Brexit has also made access to trade data at regional level especially important, but had also highlighted a need for improved statistics across a number of areas outside of core economic statistics. These include inward and outward migration and representation of EU migrants by sector at regional and local levels. The ONS is aware of some of the issues, and they are being addressed through the Economic Statistics Analysis and Strategy³

Access to vintage data

Many participants referred to difficulties in replicating published work through updating results because of revisions of the data which make comparisons problematic and because the website does not hold all vintage data which are instead moved to the national archive. A number of participants commented that they find it hard to access data and information that was previously available. There was a view that users could save data themselves, and some had done this in order to make it easier to reconstruct earlier analyses using updated comparisons. However, most users were not in this position and would prefer that the data is made as comparable as possible when changes are made.

Another issue raised by all focus groups was the difficulty of making comparisons between older and newer series in constructing time series. Problems included finding the data as well as taking account of changes in its construction over time. It was agreed that such difficulties can be overcome by skilled users who are familiar with the data, but present significant challenges to others. As one participant stated:

‘[It’s difficult] even for intensive users, if you’re using something for the first time, when you’re trying to draw conclusions, to know that you’re drawing the right conclusions... It can often be quite difficult to find the metadata, to be sure you’re looking at the right thing and not misunderstanding what it’s trying to say.’ (Economist, trade association)

There was also a view that comparisons are good enough despite breaks in series but, again, for skilled users. A common view was that it is important to be clear about ways in which changes might make comparisons over time problematic, but that it was important that the data was available for these to be made.

There was a view that the ONS puts proportionally too much effort into areas other than production of statistics, for example producing articles.

³ See <https://consultations.ons.gov.uk/economic-statistics-transformation/esas2018/>

We asked focus group participants about how ONS economic statistics could be improved to meet users' needs better. Responses to some extent repeated earlier comments about statistical accuracy and confidence. A need was also identified for explanations of changes and indications of which figures had been changed within tables. As discussed earlier, some participants identified a need for more data on the service sector and better regional data, with the latter seen as of growing importance to policy. A number of other improvements were mentioned in response to our specific questions on this issue.

A statistics enquiry line

As discussed earlier, participants said they would prefer to access a statistics enquiry line staffed by a specialist rather than have to go through reception. This was seen as particularly helpful where the individual named on bulletins was not available and where identifying the appropriate individual might require some knowledge of users' needs. Another suggestion was that the ONS provides access to knowledge experts who can provide a bridge across related dataset and series.

Greater clarity about the construction of statistics

Other suggestions included giving a better idea of the quality of data and producing standardised versions of economic concepts, for example GDP and productivity so that users are clear about their composition. Greater clarity about their accuracy and limitations was also seen as necessary by some participants. In the absence of this, users were in the position of having to make their own judgements. There was also concern at the use of unrevised estimates by the media, politicians and other commentators.

It was also suggested that greater clarity about how data series are constructed and methodologies used would be helpful. One benefit was in enabling expert users to construct their own databases using the same sources. Wider benefits were identified in enabling greater understanding of the statistics themselves. In terms of specific tools, one focus group of research users suggested a charting tool would be useful for analyses involving several data series.

The potential benefits of improvements to ONS economic statistics

We also asked focus group participants whether improvements to ONS economic statistics might have an impact on the quality of their own, or others' outputs. A number of respondents said that the Monetary Policy Committee's (MPC) forecast could be materially improved by better statistics and greater confidence in their accuracy. Participants associated with the MPC, currently and in the past, endorsed this view. In several focus groups some examples were given of where decisions might have been different had data been more accurate.

Improved accuracy, timeliness and use of the most reliable statistics were also seen to potentially improve policy debate. They were also seen to improve journalists' reporting, particularly since new data is often used and this is inherently less reliable before revisions are made. The behaviour of markets is also affected directly by new and real time data. The potential impact on the economy highlights the importance of accurate statistics.

Looking ahead, some participants said that decisions about regional investment and transport infrastructure, and implementing industrial strategy more generally could be improved by better statistics. The challenges of Brexit were mentioned in this context. More generally,

participants said that making data easier to access would improve their own productivity and potentially quality of their outputs where they were working against deadlines.

The outward face of the ONS

Other improvements suggested by participants concerned the ONS' activities rather than the statistics themselves. One view was that the ONS should have a clearer agenda of its own, rather than seen as a deliverer of statistics. Related to this, a number of participants expressed the view that the ONS should engage more with its users and with the public more generally. As one participant argued:

'I think ONS is a bit complacent about talking to the people it knows it needs to talk to, so the usual round of journalists and the people who contact it for the data... But it would seem to me that they've got a great product: why don't they go out there and sell it a bit more?' (Academic)

Diverse views were expressed on improvements to ONS social media engagement, with some focus group participants disinterested in this form of communication, some believing it was for the general public rather than experts, but others believing that it will be an increasingly important way for ONS to communicate with users and interested parties. Some senior commentators felt that the ONS should not commit too much resource to social media for public engagement, with one participant arguing

'I don't think that's the value of the ONS is to somehow say it's got the biggest Twitter following in the country. Yes, by all means use new media but don't let that tail wag the dog'. (Participant in regional focus group)

It was also argued that the ONS could improve its communication with businesses, with one focus group participant explaining that, in his work with employers, trade unions and industry bodies, he came across many who lack awareness of ONS data and its use. The regional roadshows were seen as a step in the right direction, as was ESCOE and the ONS' increased use of social media, but there was a view that it could do much more. Equally, setting up ESCOE was seen as facilitating communication, but no substitute for direct user engagement on the part of the ONS.

6. Measuring the value of ONS economic statistics

Summary

The research explored possible ways of measuring and monetising the value of economic statistics. Through survey and focus groups methods, we explored ‘stated preference’ and ‘revealed preference’ techniques, as well as the non-monetary value of economic statistics. Finally, participants discussed more broadly the possibilities for future endeavours in this area, with focus on how best to conceptualise the value of economic statistics.

Overall, it is clear that research participants attach great importance to ONS economic statistics. But they struggle to place a monetary value on it.

Both ‘stated’ and ‘revealed preference’ questions ultimately failed, both in survey and focus group settings, as participants had difficulties conceiving of a budget for ONS economic statistics, either in itself or in comparison to other resources such as subscriptions. This is partly because they use them in their capacity as employees and cannot quantify the value of the work they produce either as individuals or by their organisation.

Perhaps more importantly, respondents characterised economic statistics as the ultimate public good. They are seen as invaluable for informed decision-making, and as such cannot be reliably measured. Generally, participants seemed more engaged with other ways of conceptualising the value of economic statistics than in monetary terms.

Survey respondents described how ONS economic statistics impacted on policy development and evaluation, economic forecasting and modelling, and business decision-making. Around 4 out of 5 of those surveyed believe that the statistics are essential for their work and that their loss would have a major or severe impact.

In the focus groups, participants suggested to conceptualise the value as the cost of poor and uninformed decision-making arising from the absence of (high quality) ONS economic statistics. Some participants, mostly from the financial sector, suggested that a proxy value for ONS economic statistics might be derived through exploring how much organisations would value gaining early access to economic statistics.

Finally, questions about hypothetical willingness to pay for statistics elicited discussions about actual and possible payments for accessing data sources, including for parts of ONS data. Some participants believed it would be wrong for the ONS to introduce charges for data, except for specific services and possibly for early access.

One of the objectives of the research was to explore the potential of areas of investigation recommended by the UN Taskforce relating to developing better methodologies to try to value/monetize the value of economic statistics.⁴ This study does not provide a final recommended approach, but this section describes our tested approaches, and provides an explanation of our experiences, findings and recommendations. It will feed into the work of the UNECE Taskforce that will further investigate the development of a methodology to monetise the value of official statistics.

⁴ Chapter 5: <https://www.unece.org/statistics/statstos/task-force-on-the-value-of-official-statistics.html>

We tested the following approaches:

- **Stated preference (in test survey).** In our preliminary test survey, circulated among a limited group of users of economic data, two questions attempted to monetise the value of ONS economic statistics with a stated preference question (not included in the final survey).
- **Non-monetary value (in final survey).** In the final survey, we included two questions about the non-monetary value of ONS economic statistics, centred around the importance of ONS economic statistics to work tasks.
- **Impact on policy and decisions (in final survey).** In the final survey, we included one open-ended question on the impact on policy and decisions of using ONS economic statistics.
- **Value, conceptualisation and revealed preference (in focus groups).** In the focus groups, we led semi-structured discussions about the value of economic statistics, as well as the conceptualisation of valuing economic statistics. This also included (largely unsuccessful) attempts to value economic statistics by revealed preferences, by ranking and placing relative value on different data sources and services.

Stated preference: test survey

In our draft test survey, we included variations of questions based on the stated preference method, in which research participants themselves are asked to put a monetary value on ONS economic statistics.

WTP	In a hypothetical market situation, how much do you think your organisation would be prepared to pay as a maximum annual subscription to enable you, as an employee, to have access to ONS economic statistics?
WTA	How much do you think your organisation would consider to be an acceptable minimum compensation in return for you, as an employee, to give up access to ONS economic statistics for a year?

The first question is known as a 'Willingness-To-Pay' (WTP) question, in which participants are asked about their willingness to pay, often in the form of an annual subscription or a one-time fee. The second is worded as a 'Willingness-To-Accept' (WTA) question, in which participants are asked about their willingness to accept, i.e. how much they would accept as a compensation for not having access to economic statistics. The distinction is useful, in order to eliminate errors arising from budget capabilities. For example, organisations with smaller budgets might be inhibited from paying an annual subscription that truly reflects the value they attach to ONS economic statistics. In this case, WTA might capture its importance more precisely.

Overall, our draft questions encountered two major problems, which led to a decision to exclude them from the survey, at pilot and main stage. The 'stated preference' approach is widely used in other areas, most notably environmental studies. Environmental surveys can feasibly ask about an individual's (or household's) willingness to pay for a reduction in, say pollution, as the individual is fully involved and knowledgeable of their own budget size and priorities. In contrast, most users of ONS economic statistics are operating in a capacity as employees of an organisation and should therefore be asked about access paid for by their

employer. However, the individual user will not necessarily be involved in, or knowledgeable of, budgetary decisions and priorities of their organisation.

A potentially better approach could be to sample differently, and ask people with budgetary responsibilities to respond on behalf of their organisation. This would be complemented by more detailed questions about the nature of their organisations, as well as their budget size and priorities, including money spent on similar goods such as alternative data sources.

Because of the problems associated with asking employees about organisational matters we decided to ask an open-ended question about the monetary value in the test survey rather than presenting a series of closed options or ranges. In doing so we used the approach of a previous study attempting to evaluate the economic impact of the Economic and Social Data Service (ESDS).⁵ This approach means that participants are unbiased in their estimates, but may have difficulty coming up with a figure. The approach also has the advantage of allowing the researcher to identify protest answers, in which participants effectively refuse to accept the hypothetical nature of question. The most typical examples would be answering that ONS economic statistics is a public good which should be freely accessible.

Due to the issues outlined above, we opted against including a ‘stated preference’ question in the final survey. To explore alternative options, particularly with the focus groups in mind, we liaised with a leading academic in the field of behavioural science who has written extensively on stated and revealed preference approaches, including on using WTP and WTA questions to determine the value of a public good. Overall, he cautioned against using the stated preference approach to value economic statistics, in particularly arguing that people found it hard enough to estimate WTA and WTP when it is on behalf of a household budget.

But he advised that we could explore the feasibility of using a revealed preferences approach in the focus groups. He advised on a step-by-step approach, in which we would first ask participants to rank how ONS economic statistics compare to other resources and priorities in the organisation; then push respondents to estimate the relative value of the priorities; and then finally to explore whether this could be used to estimate some kind of monetary value. He stressed that these were very complex questions, which would require a full-length focus group and preferably background material to be sent to participants beforehand, and even then he cautioned against “hoping for too much.” In light of this and the other issues we wanted to explore during the focus groups, we chose an exploratory approach, which is further described in the focus group section.

In addition, we decided to include questions about the non-monetary value of economic statistics in the final survey. The findings are described below.

Questions about non-monetary value of economic statistics: final survey

The survey asked two related questions about the value of economic statistics: one about the importance of ONS economic statistics to work or studies and one about the perceived impact on the respondent’s work if they were not able to access ONS economic statistics. In both cases, a large majority of respondents recognised the value of economic statistics to their work. Figure 14 shows that 80% of respondents suggested that not having access to ONS

⁵ <http://www.esrc.ac.uk/files/research/research-and-impact-evaluation/economic-impact-evaluation-of-the-economic-and-social-data-service/>

economic statistics would have either a severe or major impact on their work, whilst Figure 15 shows that 82% suggested ONS economic statistics were either essential or important to their work.

Figure 14. Impact on work if not able to use ONS economic statistics

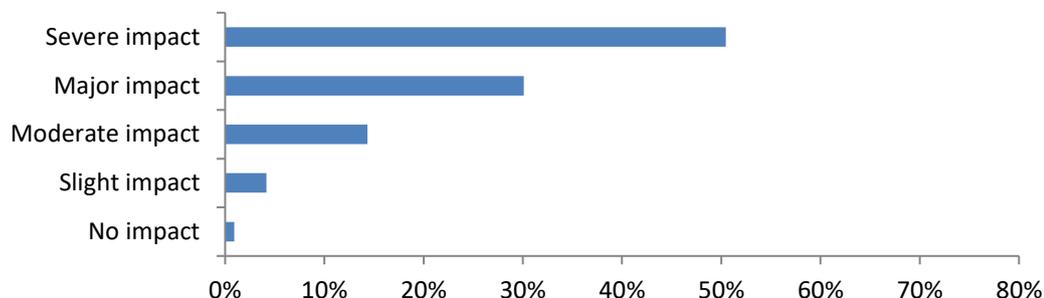
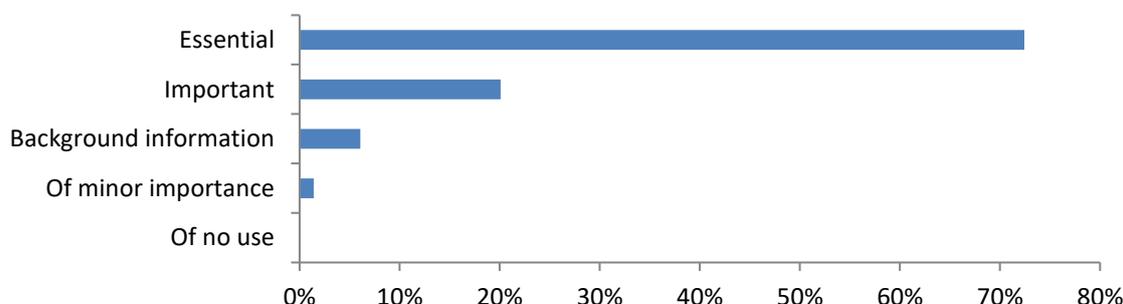


Figure 15. Importance of ONS economic statistics to work or studies



Impact on policy and decisions: final survey

As an indication of the value of ONS economic statistics, the survey also asked respondents whether ONS' economic statistics and services had helped inform any decisions or policies made by them (or by their organisation) over the last years.

- 59.4% answered 'yes'
- 17.0% answered 'no'
- 23.6% answered 'don't know'

A relatively high number responded 'don't know', which might reflect that many might not be in a position to know whether economic statistics have had an impact on any organisational decisions. One respondent said:

'I'm not sure to be honest. I do economic reporting and analysis, but I'm not sure to what extent the statistics provided by the ONS impact the business decisions higher up. I know they are part of the process, but I don't know much beyond that.' (Analyst, private business)

The question was followed-up by an open-ended question to provide examples, completed by 70 respondents. These have been analysed for common themes and are presented below.

A major theme of the responses was the importance of ONS economic statistics in policy development and policy evaluation. Respondents emphasised that economic statistics were crucial in informing policy development and public spending decisions in central and regional government departments and bodies, as well as in subsequent policy evaluations and impact assessments. This included understanding the impact of specific policies over time. In addition, a large number of respondents said the statistics informed their and others' research findings, which subsequently fed into policy development.

More specific examples included:

- Inflation statistics, particularly the Retail Price Index, were crucial in informing decisions around the setting of various fees, interest rates and significantly shaped the pension industry.
- Setting national living and minimum wage
- Shaping trade policy, e.g. estimation of tariff costs
- Estimating sector contribution to environment progress and economy
- Informing campaigning and lobbying on a variety of subjects, such as pay inequalities, gender pay gaps, preferential treatment for industrial strategy etc.
- Helping identify issues of importance and future policy needs, such as disability employment gap
- Evaluating taxation impacts of motoring taxes
- Influencing organisations' hiring and relocation decisions
- Informing research in general, e.g. real wage trajectory, impact of austerity, understanding the productivity puzzle
- Data driving news agenda, which in turn shapes narratives and policy development
- Validating information from other sources

Another major theme was economic statistics as an essential tool when forecasting and modelling the UK economy. On a general level, a number of respondents indicated that ONS economic statistics were an essential part of the general background and cumulative knowledge about the UK economy, which feed into research and decision-making processes, both in the private and public sector:

'ONS economic statistics are essential for providing contextual information for the recommendations of the public sector pay review bodies' (Civil servant)

'Gives an invaluable general picture of the economy as a whole, and different sectors in detail against which to base business judgment and decisions.' (CEO, private business)

Respondents who typically worked in the private sector also focused on the importance of ONS economic statistics in designing business strategies, consulting clients, making investments and conducting risk assessments.

'We often use ONS data as a barometer for market size and so business strategies are informed by ONS data and other data.' (Manager, trade association)

Conceptualisation of value and revealed preference: focus groups

We asked focus group participants a number of questions aimed at exploring the value of economic statistics, both in monetary terms and more widely. We asked how much their organisations might pay to have access to ONS economic statistics; about how they might make the financial case to their employers; how they might compare them to other resources they used to carry out their work and, more broadly how the value of economic statistics might be conceptualised. This included the extent to which economic statistics are a public good and are beyond monetary value.

While participants said these were reasonable questions to ask, they are also very hard to answer. In particular, participants in all focus groups had difficulty conceiving of an actual budget for ONS economic statistics, either in itself or in comparison to other resources, such as subscriptions. As discussed earlier, most users of economic statistics are not involved in, or knowledgeable of, their organisations' budgetary decisions and priorities, or in some cases how these are filtered through to the decision-making process. For those who were more aware of budgetary priorities and decision-making, it was clear that ONS economic statistics were valued very highly: for instance, a high-level civil servant said that given the spending of their department and their use of economic statistics, it didn't seem out of scale to spend 1% of their departmental budget on economic statistics.

Generally, however, participants seemed more engaged with other ways of conceptualising the value of economic statistics. These are described below.

Absence of ONS economic statistics

As a proxy for the value of economic statistics, focus groups explored the question of what would happen in the absence of ONS economic statistics. As a reflection of its perceived value, most participants could not imagine such a world, or at least one in which they were able to do the job of analysing and understanding the economy, its health, direction and changing nature. It was remarked that the statistics are essential in making fair and evidence-based decisions at a high level, for example interest rates and lower levels, such as pay. Commenting broadly on the role of economic statistics in society, one participant remarked:

'It's pretty hard to imagine a world in which the ONS statistics didn't exist, for us. I'm sure normal people could imagine it, but I can't imagine a world... It's like not having water. No stats?' (Academic)

Some participants raised the point that, if ONS statistics were not available, either for free or charged for, their organisations would need to assemble the statistics they needed themselves, and that this should be one consideration when placing a value on ONS's outputs and services. As one participant said:

'If the ONS didn't publish [the statistics], we'd all start going round trying to create them ourselves in some shape or form, and its far more inefficient.'
(Economist, public organisation)

This comment reflects the fact that it is hard to imagine a world without the use of data and statistics. In the absence of ONS economic statistics, organisations would create or pay for other non-official sources of economic statistics. Whilst these would arguably be less cost-effective and reliable due to the advantages of official statistics, it is very difficult to predict

the difference in quality and cost-effectiveness, and the impact this would have on policies and decisions.

For some participants, for example local authorities, the idea that they might need to pay for or produce economic data themselves was not seen as feasible since they lacked both expertise and financial resources. Equally, academic and policy researchers said that much of the work they carried out could not be done if the statistics were not available and had to be compiled. This was seen to have obvious implications for policy making, including in the area of employment, skills, training and economic development. It was suggested that the value of economic statistics might be conceptualised in the costs of poor policy making, an issue referred to earlier in the report and which will be explored in our case study research later in this project. As two participants argued:

‘Getting social policy wrong could cost lots of money. Getting trade policy wrong could cost lots of money’. (Civil servant)

‘The cost to the economy of poor economic policy is far greater than the cost of [providing] economic figures.’ (Civil servant)

Economic statistics as a public good

The issue raised most frequently and which engaged most participants was economic statistics as a public good, with a senior policymaker describing economic statistics as the ‘ultimate public good’. Given this role and contribution, many participants were reluctant to place any kind of monetary value on the statistics, even when asked about the hypothetical scenario. Some senior participants were somewhat nervous about the question, feeling that it might encourage marketization of ONS services. It was noted that paying for economic statistics was not as far-fetched as, say, paying for a reduction in pollution, as many organisations paid subscriptions to various data sources. Many participants simply felt that statistics are essential for complex economies and for making key decisions about the economy.

The view that economic statistics are much more than a product and are a public good tends to confirm that survey questions on monetary value would be likely to produce ‘protest’ answers concerning the wider social value of ONS statistics and role in a democracy. As one respondent said:

‘I put a lot of weight on this idea of public value, and I would personally shy away from putting a pound sign on it. I’d find it very difficult to say to [university employer] we should pay so much to ONS to get these data because I’d want to argue that we should have access to it’. (Academic)

More widely, another participant argued:

‘There’s a reason why the treasury pays for it from public purses, because it’s a public good that everyone benefits from.’ (Economist, public organisation)

Since everyone benefits from a public good, one respondent also made the point that asking individual users would inevitably underestimate the value of economic statistics.

Revealed preferences

Whilst participants did not have the required knowledge of their organisations' payments and subscriptions to alternative data sources to make a 'revealed preferences' exercise meaningful, the possibility of ranking and placing relative value on different sources was discussed.

Some participants noted that for many of their subscribed data sources, they were effectively 'paying for the convenience' rather than the underlying statistics, but it would still give some sort of notional value about how organisations value economic statistics. It was also noted that many of those data sources were only possible due to the existence of ONS economic statistics. One respondent said:

'We do pay tens of thousands of pounds for license to other products... business databases, retail databases ... where some of them use a terrific amount of ONS data at their core.' (Analyst, finance sector)

Value of early access

Another suggestion was to explore how much it would be worth to an organisation to be able to access economic statistics early, which could act as a proxy for the value attached to the data. This was particularly discussed among finance sector professionals:

'From a financial market's perspective, one construct you could think about is, if the data becomes available to everybody later, but it's only made available to some people early, how much would you be prepared to pay to get access immediately.' (Manager, finance sector)

'If someone told me I can get GDP data one day before, that's worth loads. I don't know how much, but that's worth loads of money' (Analyst, finance sector)

Payment for data sources

Unsurprisingly, questions to focus group participants about hypothetical willingness to pay for statistics led to discussions about actual payments for accessing data sources, including for parts of ONS data. Some participants reasoned that, should the ONS introduce charges, these would be borne by a very large number of users and may be relatively small rather than reflecting the actual work involved in their compilation. Others saw a case for differential charges, for example with private bodies paying more than public sector ones. However, setting appropriate rates was also seen as problematic and the status of some user organisations with regard to payment might be difficult to establish.

One participant from a government department explained that its surveys cost several hundred thousand pounds to produce, so that paying a contribution to ONS would not seem unreasonable. However, participants in other groups pointed out that charging public sector organisations for ONS statistics would simply involve moving public funds around, for no overall benefit, and that such users were probably in the majority. However, one benefit in a paid-for system was identified in the ability for users such as government departments to have 'more of a hands-on steer in what the ONS does'. However, there was some concern that this might compromise the ONS's independence and integrity.

Other participants made the point that they already pay ONS for additional statistics, for example regional data, and that they would find it difficult to place a value even on this, feeling that the charges do not reflect the benefit to their organisation, or more widely the public. This may be partly because the sums paid for additional services appeared to be fairly small, for example in the region of hundreds rather than thousands of pounds yet were used in strategic decision-making.

Some participants saw a case for charging some users, including government departments as well as commercial users. There was also seen to be a case for charging for various levels of access. It was also suggested that data might be made available early to users paying for data on an early release basis. Others could then receive it later free of charge. A case was also put for charging for specialist data, as currently but possibly to a greater extent. However, the introduction of charging was seen to potentially reduce use of statistics and have implications for the role of objective analyses and its influence on policy. One concern was that any commercialisation through restriction of data might affect the type of data that ONS produces, and that this would inevitably shift resources to commercial users.

7. Conclusions of the baseline study

The survey and focus groups found that ONS economic statistics are regarded as essential by regular and expert users of economic statistics. In this concluding section of the first stage of our research we present the main findings, messages and the implications of these for future studies on the value of official economic statistics.

Background

In March 2015, the Conference for European Statistics (CES) established a United Nations Economic Commission for Europe (UNECE) Taskforce to define the value of official statistics and develop ways to measure its value. Given that official statistics providers face competition from an ever-increasing number of private data providers, and tightened government budgets threaten their continued funding, it was explained that official data providers need to demonstrate why their services are of high value, and especially that value exceeds costs.

The UNECE Taskforce published its first report in 2017. One of their recommendations was for national statistical offices to explore ways of placing a monetary value on official statistics, and outlined a number of possible ways to do this. In this context, the Economic Statistics Centre of Excellence (ESCoE) was commissioned by the ONS to test these approaches. It is the first time that the UNECE recommendations have been piloted in the UK on official economic statistics. As such, it is exploratory in nature, focused on identifying promising approaches and how to mitigate challenges, as well as identifying lessons learnt for future studies. The study is a baseline report, and ESCoE will publish another study in 2020.

Findings

The report findings show that **the value of official economic statistics is very high, most likely far exceeding the cost of providing the statistics**. This is based on our research with regular economic statistics users including a survey (N=218) and a series of 9 focus groups (N=49). The research showed that participants attach great importance to ONS economic statistics, and that it was invaluable to their work and instrumental in informing policy decisions. But in addition to these general insights into the importance of ONS economic statistics, this report also explored ways to measure its monetary value.

We tested a ‘stated preference’ approach. It’s a simple approach where you ask participants how much they (or their organisation) hypothetically would be willing to pay to have access to ONS economic statistics. This is called “Willingness to Pay”, and is widely used in other fields. Another approach is ‘Willingness to Accept’, which asks participants how much they (or their organisation) hypothetically would be willing to accept to give up their access to ONS economic statistics. While seemingly straightforward, our study identified several issues in applying these approaches to measuring the value of economic statistics.

Firstly, this is a really hard question to answer. People said the value was very high and that it helped inform business decisions and policy development, and gave many examples of this. But they found it very difficult to place any monetary value on this, or compare it relative to other resources (‘revealed preference approach’). Part of the reason for this was that **participants said they use ONS economic statistics as employees of an organisation, and they have limited knowledge of budgetary decisions and priorities of their organisation**. While they can provide strong evidence that ONS economic data are invaluable to their own

work, they cannot quantify to what extent their work subsequently contributes to improving policy decisions or impact on individual and organisational decisions. In contrast, when these types of questions are asked in other fields, for instance on people's willingness to pay for a reduction in pollution levels in their local area, respondents are fully knowledgeable of their own household budget and potential trade-offs. Given these considerations, future studies should consider how to construct a survey sample which includes a mix of people who are involved and knowledgeable in policy, organisational and budgetary decisions as well as those who use the data in their day-to-day work. It would also be important to collect data about the nature of respondents' organisations such as their budgetary size, priorities and preferences.

Another strong theme that we identified during our focus groups was that **participants were somewhat nervous about hypothetical questions about willingness to pay**. They said that paying for economic statistics was not as far-fetched as, say, paying for a reduction in pollution, because many organisations already pay subscriptions to various data sources. Some worried it may encourage a marketization of ONS services, and participants repeatedly emphasised the value of ONS economic statistics as a public good from which everyone benefits. As such, our discussions showed that even if you emphasise that it is purely a hypothetical exercise, any future survey or qualitative research with 'stated preference' questions or similar methodologies should be aware of this, as it will inevitably attract many 'protest answers', in which respondents refuse to accept the premise of the question, or the motivation behind the study.

In our broader discussions about how to value economic statistics, **participants found it useful to think about its value by thinking about the counterfactual, e.g. what would happen in the absence of ONS economic statistics?** As participants said, it is very difficult to predict what would happen with the quality and reliability of other data sources in such an open-market. But most participants suspected that they would be less reliable and accountable than official economic statistics. This leads to **one of our main recommendations to use innovative case studies that show the cost of getting economic policy wrong when decisions are based on inaccurate statistics**. This exercise is part of the current study, but could be expanded to include other fields and other examples, as a powerful way to show the importance of the accuracy and independence of economic statistics. These can be designed both for expert users, but can also be designed as more simple examples aimed at a public audience.

Due to the difficulties of measuring the value of official economic statistics in monetary terms, **another recommendation is to explore the value of economic statistics in an innovative qualitative study with both public and expert users**. While studies with expert users will be good in identifying exactly in which ways official economic statistics are valuable and to what extent, studies with the public could explore to what extent the average British citizen is aware of the value of economic statistics, and to what extent their assessment changes when provided with information. Such a study could include focus groups with the public about how they see the purposes and use of economic statistics. This would be explored broadly at first and in participants' own words, and then researchers would introduce different exercises and information to aid discussions, e.g. how different economic statistics are used for policy-making, case studies demonstrating the costs of poor policy-making based on inaccurate statistics, exercises exploring how much or how little money the Government spends on the

collection of official statistics compared to other budgetary items etc. The study could also include public survey research, and it could potentially be powerful in showing that the public recognises the value of official economic statistics, whether this is before or after given information about the use and purposes of economic statistics. Alternatively, it would provide recommendations as to how the value of economic statistics could be communicated effectively to the public. Furthermore, another round of research with regular and expert users would need to be more targeted in terms of people's position and responsibilities in their organisation, such as targeting senior civil servants for interviews.

Finally, in the current political environment, there will be pressures and appetite among national statistics offices to place a monetary valuation on their outputs in order to demonstrate that their services are of high value. As the UNECE Taskforce themselves recognises, it is the old statisticians' dilemma: they are good at measuring almost everything, except their own activities and outputs. Placing a monetary value of official statistics is still a worthwhile exercise, but some of our research participants said that national statistics offices should proceed with caution. **The methodology behind such an estimate may not conform with the high standards followed by official statistical agencies, and in this sense, it could potentially be counter-productive and even undermine the perceived reliability and independence of statistics themselves.** But given our study was exploratory, at this stage we would not rule out that such an endeavour could be successful. In the meantime, we have provided a number of recommendations for the way forward, and the UNECE Taskforce will soon publish more outputs on how to value official statistics, which will inform the follow-up study in 2020.

Appendix 1. The survey sample

Table 1 below shows the gender and age distribution of the survey sample, by different industries. The bold figures are absolute numbers, with smaller figures showing the percentage of the respondents in that specific industry.

Table 1. Gender and age distribution of sample, by industry

<i>Industry / Sector</i>	<i>Freq.</i>	<i>%</i>	Gender		Age group					
			<i>Male</i>	<i>Female</i>	<25	25-34	35-44	45-54	55-64	>65
<i>Academia or research</i>	74	34.4%	53 71.6%	21 28.4%	4 5.4%	10 13.5%	16 21.6%	16 21.6%	11 14.9%	17 23.0%
<i>Local/regional government department</i>	15	6.9%	10 66.7%	5 33.3%	0 0%	4 26.7%	3 20.0%	5 33.3%	2 13.3%	1 6.7%
<i>Central government department</i>	38	17.9%	27 71.1%	11 29.0%	1 2.6%	14 36.8%	9 23.7%	8 21.1%	4 10.5%	2 5.3%
<i>Public organisation</i>	18	8.7%	11 61.1%	7 38.9%	2 10.5%	4 21.1%	8 42.1%	4 21.1%	1 5.3%	0 0%
<i>Journalist/media</i>	10	4.6%	9 90.0%	1 10%	0 0%	0 0%	3 30.0%	3 30.0%	2 20.0%	2 20.0%
<i>Voluntary and charity</i>	9	4.1%	5 55.6%	4 44.4%	1 11.1%	1 11.1%	1 11.1%	1 11.1%	3 33.3%	2 22.2%
<i>International organisation</i>	3	1.4%	3 100%	0 0%	0 0%	2 66.7%	0 0%	0 0%	0 0%	1 33.3%
<i>Private business</i>	33	15.1%	25 75.7%	8 24.2%	0 0%	8 24.2%	7 21.2%	8 24.2%	7 21.2%	3 9.1%
<i>Private user</i>	5	2.3%	5 100%	0 0%	0 0%	0 0%	2 40.0%	0 0%	1 20.0%	2 40.0%
<i>Trade association</i>	6	2.8%	6 100%	0 0%	0 0%	2 33.3%	3 50.0%	0 0%	1 16.7%	0 0%
<i>Trade union</i>	3	1.4%	3 100%	0 0%	0 0%	1 33.3%	0 0%	2 66.7%	0 0%	0 0%
<i>Retired</i>	1	0.5%	1 100%	0 0%	0 0%	0 0%	0 0%	0 0%	1 100%	0 0%
Total respondents	215*	100%	158	57	8	46	52	47	33	30
Total in %	100%	100%	73.5%	26.5%	3.7%	21.3%	24.1%	21.8%	15.3%	13.9%

*3 respondents who are included in the final analysis (n=218) didn't respond to industry/sector question.

Figure 16. Age group of respondents

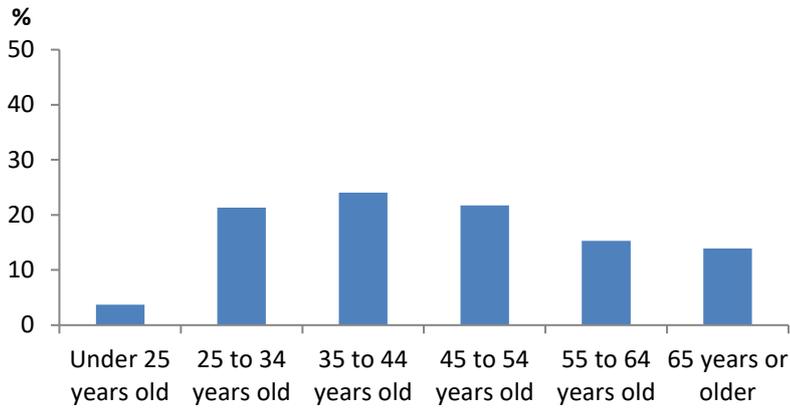


Figure 17. Gender of respondents

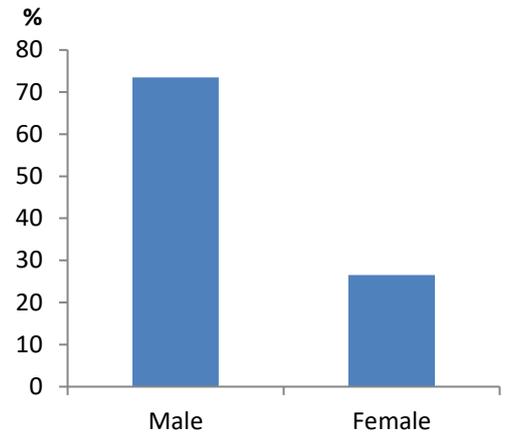


Figure 18. Sector/industry of respondent

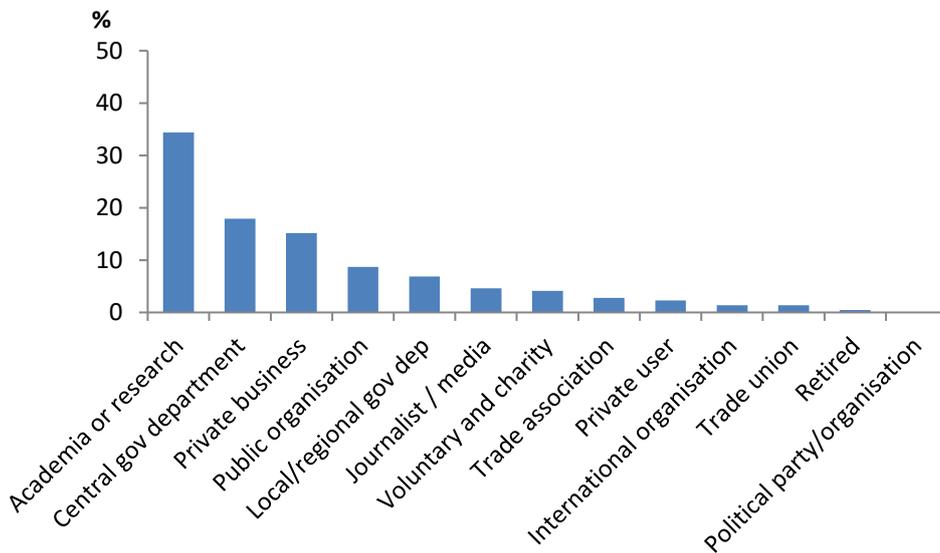


Figure 19. Job title of respondents

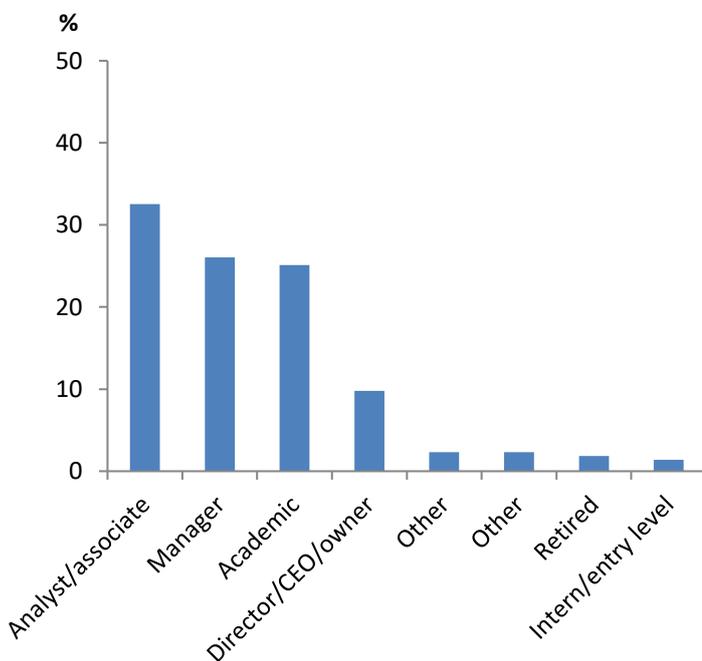
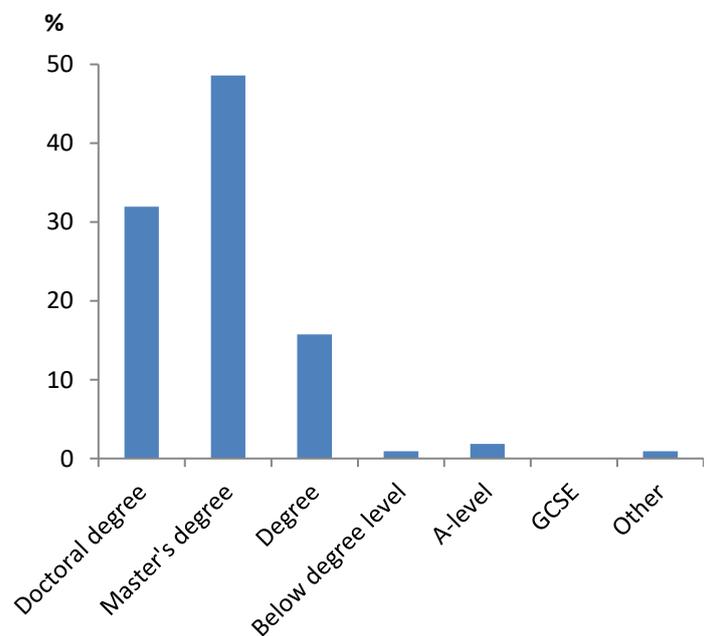


Figure 20. Highest educational level of respondents



Appendix 2. Online survey

The survey was designed and distributed online in Survey Monkey. The survey is based on the recommendations on promoting, measuring and communicating the value of official statistics in the [report by UNECE](#), and especially Annex 3 which contains generic user survey questions for statistical offices.

Introduction to respondents:

Welcome to the Economic Statistics User Survey, conducted by the **Economic Statistics Centre of Excellence (ESCoE), an independent research centre** sponsored by the Office for National Statistics (ONS). Launched in January 2017, ESCoE brings together academic experts to address the challenges of measuring the modern economy, working in collaboration with the ONS.

As part of a UN Economic Commission for Europe pilot on valuing economic statistics, the ESCoE is **evaluating the benefits to society generated by economic statistics** by asking users about their use and experiences of ONS economic outputs, whether accessed directly through ONS or via other parties. The findings will also **inform ONS plans to improve economic statistics**. Please be assured that your responses will only be used for research purposes and any personal information will be treated in confidence.

Please answer in your own capacity as a user rather than on behalf of your organisation.

We appreciate you taking the time to participate in this survey which should take about **10 minutes to complete**.

We would be grateful if you could complete the survey by X. If you have any difficulties with completing the survey or have any questions about the project, please contact X, at X or on X.

Use of economic statistics

<p>1. In the last 12 months, which ONS economic statistics have you used? (Please select all that apply.)</p>	<ul style="list-style-type: none"> Industry and business statistics International trade and balance of payments Public sector finance Productivity Inflation and price indices GDP and national accounts Regional and local economic statistics Employment, wages and labour market I haven't used ONS economic statistics in the last 12 months Other (please specify)
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<p>2. When did you last use ONS economic statistics?</p>	<ul style="list-style-type: none"> Earlier today Yesterday About a week ago 2-3 weeks ago About a month ago 2-3 months ago 4 months ago or more I have never used ONS economic statistics
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2b. [if an option more than a month ago selected] Why have you not used ONS economic statistics in the last [insert time period answered above]	
---	--

<p>I have had no need for any ONS economic statistics I have found another website/source to use that suits me better I find it difficult to navigate the ONS website I prefer the design of another website or source I prefer the infographics or reports provided by another website or source I had not known about the ONS before now Other (please specify)</p>

3. How frequently do you usually use ONS economic statistics?	
--	--

<p>Daily Weekly Monthly Quarterly Annually Less often Never</p>

If never, routed to characteristics section.

4. How frequently do you usually contact the ONS about its economic statistics (e.g. phone, email)?	
--	--

<p>Daily Weekly Monthly Quarterly Annually Less often Never</p>

4. For which purposes do you use ONS economic statistics? (Please select all that apply.)	
--	--

<p>Work in general Business or market analysis Education Legislative work Media use Modelling or forecasting Negotiations Personal interest Policy formulation or monitoring or evaluation Regional analysis Reports or publications Research Reuse in other products Service planning Other reason (please specify)</p>
--

4A. How important are the ONS’s economic statistics for the purposes you mentioned?

[Displays only those purposes that were selected]

	Essential	Important	Background information	Of minor importance	Of no use	Don't know
Work in general						
Business or market analysis						
Education						
Legislative work						
Media use						
Modelling or forecasting						
Negotiations						
Personal interest						
Policy formulation/monitoring/evaluation						
Regional analysis						
Reports or publications						
Research						
Reuse in other products						
Service planning						
<i>Text inserted in "Other reason" above</i>						

Accessing statistics

5. How do you usually access ONS economic statistics and information? (Select 1-3 options)	<ul style="list-style-type: none"> ONS website ONS social media (Twitter, Facebook etc.) Contact ONS staff (email, phone etc.) ONS Application Programming Interface (API) De-identified ONS Research Data Publications (printed, online) Press (printed, online, broadcast) Social media (Facebook, Twitter etc.) Statistical releases Third-party data provider (for example, Thomson Reuters Datastream, Bloomberg) Google search Other (please specify)
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6. How do you become alerted to the latest ONS economic statistics? Select all that apply.	<ul style="list-style-type: none"> ONS Release Calendar ONS website ONS social media (Facebook, Twitter etc.) ONS email contact Press (printed, online, broadcast) Other publications (printed, online) Social Media (Facebook, Twitter etc.) Other (please specify)
---	--

User satisfaction

7. How satisfied or dissatisfied are you with the extent to which the ONS economic statistics you use?

	Very satisfied	Satisfied	Neither satisfied nor dissatisfied	Dissatisfied	Very dissatisfied
Are trustworthy					
Are free from political interference					
Meet your needs					
Are accurate					
Are detailed enough					
Are clearly documented					
Are easily understood					
Are clearly presented					
Are easy to find					
Are timely					
Are frequent enough					

8. Thinking about ONS economic statistics, to what extent do you agree or disagree that the ONS?

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
Protects confidentiality of individual data					
Collects and disseminates useful statistics					
Explains data sources and methods clearly					
Provides a guidance on re-releases of corrected data					
Supports the interpretation and use of statistics					
Effectively informs public debate					
Provides a quality customer service					
Is active in developing new services					
Is actively present in Social Media					

9. Please tell us:

What you think the ONS is <u>doing well</u> regarding economic statistics?	
What you think the ONS <u>could do better</u> regarding economic statistics?	

10. How important are ONS economic statistics and services for your work or studies?

Essential Important Background information Of minor importance Of no use
--

11. Have ONS’s economic statistics and services helped inform any decisions or policies made by you (or by your organization) over the last years?

Yes	No	Don't know/NA
[If yes] Please provide examples:		

12. What impact would it have on your work if you were not able to use ONS economic statistics?

- Severe impact
- Major impact
- Moderate impact
- Slight impact
- No impact

14. As a user, how satisfied or dissatisfied are you with the following areas of ONS economic statistics?

	Very satisfied	Satisfied	Neither satisfied nor dissatisfied	Dissatisfied	Very dissatisfied	Don't use
Industry and business statistics						
International trade and balance of payments						
Public sector finance						
Productivity						
Inflation and price indices						
GDP and national accounts						
Regional and local economic statistics						
Employment, wages and labour market						

Characteristics of users

**15. Please tell us about you.
(We will not publish any personal information.)**

- | |
|---|
| Under 25 years old
25-34 years old
35-44 years old
45-54 years old
55-64 years old
65 years or older |
|---|

Age group	
-----------	--

Gender	Female / Male
Sector /Industry	
	Academia or research Local or regional government Central government department Public organisation Journalist / media Voluntary and charity Political party or organisation International organisation Private business Private user Trade association Other (please specify)
Job title or role	Open-ended
	Intern / Entry level Analyst / Associate Manager Director / CEO / Owner Academic Other (please specify)
Highest level of education attained	Dropdown list
	Doctoral degree Master's degree Degree Higher qualification below degree level A-level GCSE Other (please specify)

16. ESCoE are organising a series of roundtables across the UK this summer to discuss the use of economic statistics in more detail, and will also be carrying out a follow-up survey in 2020. We are very interested in your views. Please indicate whether you would like to take part in a roundtable discussion and/or if you are willing for us to re-contact you in 2020 to take part in the follow-up survey.

- I agree to be contacted to take part in a roundtable
- I agree to be contacted for a follow-up survey

17. In either case, please can you provide us with your name and email address. Your personal details will be used only to contact you and the information will not be used for analysis purposes.

- Please provide name and email address.

18. What, if <u>anything else</u>, would you like to say about ONS' economic statistics?	
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Thank you very much for taking the time to complete this survey.

Appendix 2. Focus group discussion guide

Timing overview

4:00 - 4.15	Arrival, consent form, tea and coffee
4.15- 4.20	[1] Introduction from ESCOE
4.20 - 4.30	[2] Introduction from participants on their use of economic statistics
4.30-4.40	[3] Accessing economic statistics
4.40-4.55	[4] The statistics: scope, quality and usability
4.55-5.05	[5] Decision-making using economic statistics
5.05-5.15	[6] Comparative value of ONS economic statistics

<p>4.00 -4.15</p>	<p>Arrival and welcome SS and HR Participants to complete consent form</p>
<p>4.15 - 4.20</p>	<p>[1] ESCOE introduction SS</p> <p>Brief project background HR The survey, follow-up and place of the focus groups within the research. We are interested in your own views and experiences of using ONS statistics as a user, rather than the perspective of your organisation.</p> <p>Housekeeping The session will be recorded and transcribed. The content will be accessed only by the research team and contributions will be kept anonymous. Toilets are located... Fire exits are located... Not expecting a fire alarm</p>
<p>4.20-4.30</p>	<p>[2] Participant introductions HR Please introduce yourself, say where you work, what your role is, how you make use of ONS statistics and what outputs you produce from them. (use list of economic statistics as a prompt)</p>
<p>4.30-4.40</p>	<p>[3] Accessing economic statistics HR How do you usually access ONS economic statistics (eg website, social media). How well do the routes to website access work for you? (90% in survey use website & low levels satisfaction accessing stats) If you make contact via phone or email, why?</p>

4.40-4.55	<p>[4] The statistics: scope, quality and usability SS How well do the statistics in the economics series meet your needs (quite low % say v satisfied)? And how could they be improved? Probe for: Accuracy, detailed enough, clearly documented, easily understood, clearly presented, timely, frequent enough, gaps</p>
4.55 -5.05	<p>[5] Outputs and decision-making using economic statistics HR [SS to probe] Could your outputs be improved through improvements to ONS economic statistics? How? Could the <u>decisions</u> you make using economic statistics be improved through changes to ONS statistics? How?</p>
5.05-5.15	<p>[6] Comparative value of economic statistics HR [SS to probe] 1. General discussion about monetary value: Prompts:</p> <ul style="list-style-type: none"> • How much might their organisation pay to have access to ONS economic statistics? (lower and upper bound). • How would you make the financial case to your organisation? Probe for their value as trustworthy & free from political interference <p>2. Could you rank ONS economic statistics as a resource against other resources: library resources, in-house seminars/expert meetings, subscriptions to newspapers and weeklies, access to training and development (to be expanded). IF YES: how would you go about this, and deciding their relative value?</p> <p>3. Can you place a monetary value at all?</p>