



Productivity Statistics User Group workshop: Summary and Outcomes

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Introduction

User engagement is important to understanding the needs of those who use our statistics. It helps ensure that the statistics we produce are suitable for the purposes to which they are put. To this end the Productivity Statistics User Group was created.

Previously, ONS held Productivity Workshops with other Government departments, the last of which took place in December 2008. To engage more closely with our users the productivity user group was relaunched with a workshop held at HM Treasury on 21 February 2012. Known users were contacted directly and the event was also promoted in the Labour Productivity - Q3 2011 statistical bulletin^[1]. If you wish to be invited or to present at any future events then please register your interest via productivity@ons.gsi.gov.uk.

ONS and representatives from other organisations presented on the quality and use of productivity statistics. Open discussion then followed on from this. A questionnaire was issued at the event which is currently available on the Productivity Measures Guidance & Methodology^[2] pages. The questionnaire and discussion during the event provide the feedback presented below^a.

Aims

To re-launch the user group.

To discuss recent developments in productivity measurements.

To gauge user requirements, and establish a generally accepted medium and frequency for user interaction.

Presentations

ONS would like to extend thanks to those who contributed to the event.

Presenter	Title
Mark Franklin (ONS)	Introduction and Overview
Jean Acheson, John Appleton & Gaganan Awano (ONS)	Developing ONS Productivity Statistics
Mike G Phelps (ONS)	Public Service Productivity
Nicholas Oulton (LSE)	Labour Productivity After the Great Recession
Andrew Gurney (HM Treasury)	Recent Trends in Productivity

^a It must be noted that respondents to the survey were self-selecting so results may not be fully representative, but do provide a useful insight into the use of the statistics and perceptions of users.



Users

There were 28 attendees at the user group workshop, including presenters. There were 15 responses to the questionnaire on the day. They represented a variety of organisations and sectors. Table 1 demonstrates which organisations were represented based on the 'organisation' field of the questionnaire.

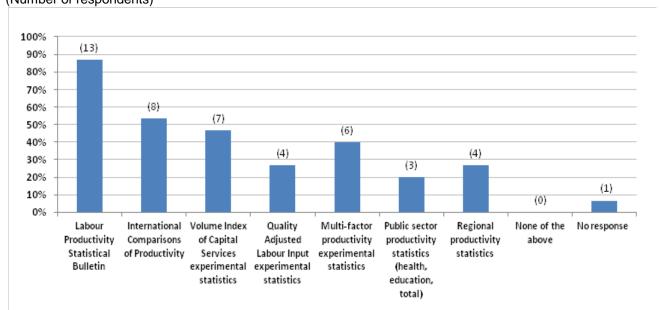
	Frequency	Per cent
HM Treasury	4	27%
Bank of England	2	13%
Academic	3	20%
Private sector	5	33%
Anonymous	1	7%

Coverage of statistics

In the user engagement questionnaire respondents were asked which ONS productivity outputs they used. All of the options presented are included in Figure 1. For the 15 respondents the Labour Productivity statistical bulletin is the most widely used ONS productivity output, followed by <u>International Comparisons of Productivity</u> and growth accounting measures.

Figure 1: Which ONS productivity outputs do you use?

Percentage of respondents (Number of respondents)



During the workshop the level of detail and disaggregation of productivity outputs were discussed. Specific points on ONS outputs are detailed below.

A user encouraged openness and the publication of as much data as possible, provided that limitations are clearly highlighted.

A user asked when data prior to 1997 would be available at a disaggregated level. This is dependent upon data being available within the National Accounts. A paper by <u>G Everett (2011)</u>^[4] explains changes to the National Accounts in the 2011 edition of the Blue Book. The main limitation on providing back series is the change in the deflation measure from the RPI to the CPI.



Commentary on statistics

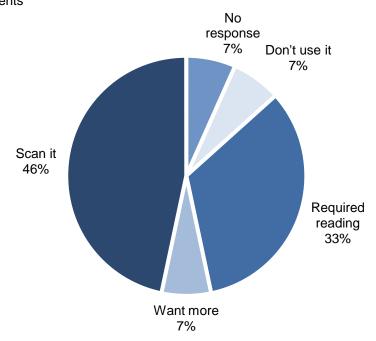
The productivity publications have recently been developed to provide more commentary in line with recommendations from the United Kingdom Statistics Authority (UKSA). Users were asked 'would access to only the time series data suffice for your needs?' Of the 11 responses, 45% responded yes and 55% responded no. This shows that the commentary and presentation is valued.

There were 15 responses to the question 'how useful is our commentary?' Figure 2 demonstrates that the majority of users scan or view the commentary as required reading. Only one respondent stated that they want more.

Discussion demonstrated a consensus that the level of commentary was appropriate for the attending users.

A user gave preference for resources to go into the development of statistics rather than commentary. However, occasional articles away from the bulletin with more analysis would be appreciated by some.

Figure 2: How useful is our commentary? Percentage of respondents



Form of user engagement

There were 15 responses to the question 'what is the preferred form of engagement for you?' Of these, 80% selected Email and 20% selected user groups. No respondents selected 'website notices'.

However, all respondents answered yes when asked 'ls this forum a useful form of engagement for you?' Furthermore, 60% of the respondents answered that they would like to see the user group convene annually, whereas 40% answered twice a year.



Proposed developments

Users were asked to rank the following list of developments in order of priority to themselves. The responses are shown below.

	Number of respondents who selected ranking:		
	First	Second	Third
Greater disaggregation of labour productivity statistics (e.g. by industry, region, time period)	9	3	1
Inclusion of BRICS/new developed economies in International Comparisons of Productivity	1	5	0
Greater consistency across ONS statistics	1	4	2
Quarterly growth accounting statistics	1	2	4
Constant price supply use tables	3	1	3
Linking business and household surveys	1	2	4
Other (please specify)	2	1	1
Other responses	Long consistent time series.	Annual measures at Supply Use Table level.	More work on ICT and e-commerce surveys.
	Update of EU KLEMS.	_	More data on small businesses.

Labour Productivity

Greater disaggregation of labour productivity is a clear development need identified by users.

During discussion, a user requested that a full array of section level series, including construction, be published. It was noted that there are issues concerning potential volatility and accuracy with these series and that the breakdown of service industries has been extended recently.

A user recommended publishing more intermediate data such as the labour input data and output data as part of the publication to assist replication and analysis. It was noted that there are two other measures of labour input published by ONS, so a third could cause confusion and the differences would need to be clearly marked.

A user requested that the unrounded data are published. Data is currently published at one decimal place. It was noted that the data used to compile the labour productivity statistics themselves are published at one decimal place and it provides a suitable level of accuracy.

The creation of sector level unit labour costs was supported. A user asked if it was possible to produce a market sector unit labour cost measure. It was noted that at present the inputs are not available to use a methodology consistent with that at the whole economy.

International Comparisons of Productivity

The inclusion of new countries, such as the BRIC economies (Brazil, Russia, India and China) was given a medium priority by users.

Growth Accounting - VICS, QALI, MFP

Discussion identified that ONS growth accounting measures were highly valued by attendees at the User Group.

The survey demonstrates that *quarterly* growth accounting measures were not given the highest priority by most users but were valued.

A user of the <u>Volume Index of Capital Services (VICS)</u>^[5] data stated a preference for greater timeliness over developments to expand the breakdown of results.



A user recommended that the assumptions in VICS and ONS capital stock measures should be consistent. In particular with regards the measurement of ICT assets. It was noted that OECD manuals suggest best practise for many of the assumptions.

On the whole users did not advocate a strong preference between these options during discussion.

The design framework of the <u>Quality Adjusted Labour Input (QALI)</u>^[6] publication was discussed in light of changes to the standard industrial classification (SIC2007).

A user recommended that a greater disaggregation of service industries be applied because of their importance to the economy. It was noted that disaggregation is important but must be balanced with the number of quality adjustment categories. The dimensions of the QALI design frame are multiplicative and so the number of categories can quickly increase. As the number of categories increases the frequency of Labour Force Survey responses in each category decreases. This can cause results to be more volatile and susceptible to outliers.

A user proposed that gender is not a relevant driver of quality and could be removed. It was noted that a combination of gender and age provides a suitable proxy for experience as the career paths of males and females can differ.

A user asked if it was possible to compile a regional dimension into QALI. It was noted that this is possible, as it is one of the characteristics identified in the Labour Force Survey (data source) but could dramatically increase the number of categories as it is multiplicative.

A user stated that the Multi-Factor Productivity (MFP)^[7] measures were developed as a diagnostic tool for the National Accounts. It was stated that EU KLEMS provides a more useful source for in-depth research as it has more detail and is internationally comparable. However, other users noted that EU KLEMS is not as timely and so the MFP publication is still valued.

A user requested that full MFP time series are published for each year, as opposed to average growth rates across economic cycles, but labelled to demonstrate that the data can be volatile in the short term.

Household and business survey linking

While the productivity branch is not responsible for designing or conducting surveys, consistency between household and business surveys can affect results, for example because of the industry of work reported. An individual contracted by one business to work for another business might not be clear about which industry they work in. However, the individual will have more accurate information on working patterns and other information.

It was noted that the industry allocation of workers has improved because of changes in the design of the Labour Force Survey brought in during 2009. A user stated that this was progress but hadn't resolved the issue. Respondents to the questionnaire did not give this development a high priority.

Constant price supply use tables

This development was suggested as productivity analysis requires volume measures of input and output. Three respondents to the questionnaire ranked this as their main priority on the development agenda, and discussion revealed some further support. It was stated that this is not directly a development for the productivity branch and that ONS is not in a position to produce constant price supply use tables in the short term.

Double deflation

A user raised the practise of double deflation as a consistency check against errors in the compilation of value added measures. This is not directly a development for the productivity branch it was noted. ONS recognises the practice; however, it would require significant resources to undertake.

Other

A user stated that the EU KLEMS database should be updated, as it is a valuable resource for academics and others. It was noted that, while ONS does not operate EU KLEMS, it has provided data towards an update of the gross value added based measures.



Next steps for Productivity Statistics

1. Future engagement

ONS will maintain communication to users via the productivity inbox (<a href="maintain-group-will-g

2. UK Statistics Authority assessment

The UK Statistical Authority (UKSA) has recently completed a review of the Labour Productivity and International Comparisons of Productivity statistical bulletins. The statistical bulletins have maintained their status as National Statistics, and ONS will act on the recommendations published in the report, which can be found on the UKSA website[8].

3. Labour Productivity Statistics

The development of labour productivity series for additional sectors will continue. A methodology to produce sector level unit labour costs is being investigated. Also, changes in the construction employer survey, which have been incorporated into Workforce jobs estimates, could create sufficient accuracy to produce labour productivity estimates for the construction sector.

4. Publishing a longer back series

Whole economy labour productivity estimates are already published prior to 1997. Industry level labour productivity estimates will be published when output measures are available for this period from the National Accounts.

5. Publishing intermediate data

The labour input data for labour productivity measures is already available upon request via the productivity inbox. ONS is also reviewing the consistency of the labour input measures which it produces. Links to the other intermediate data sources have been made more prominent in the publication for users to analyse results.

6. Growth Accounting Measures – Volume Index of Capital Services

The next VICS publication will implement the Standard Industrial Classification 2007 (SIC2007).

The inclusion of the returns to the capital of the self-employed into the calculation of user cost of capital will be investigated. This will then be consistent across the other ONS growth accounting measures.

7. Growth Accounting Measures - Quality Adjusted Labour Input

The design framework used in calculating the quality of labour input is not fixed and will remain open for feedback and review. Apart from the industrial breakdown, now on SIC2007, the design frame used in the recent publication was identical to the previous publication to aid comparison between publications.

The treatment of the returns to the labour of the self-employed was changed in the latest release to ensure consistency across ONS growth accounting measures.

8. Growth Accounting Measures – Multi-factor Productivity

The next publication of Multi-Factor Productivity will be based on SIC2007.

The results for each year will be presented alongside the article, instead of only publishing averages over a longer time period.



Useful Links

	Title	Web Link
1	Labour Productivity Statistical Bulletin	http://www.ons.gov.uk/ons/taxonomy/index.html?nscl=Labour+productivity
2	Productivity Measures Guidance and Methodology	http://www.ons.gov.uk/ons/guide-method/method- quality/specific/economy/productivity-measures/index.html
3	International Comparisons of Productivity	http://www.ons.gov.uk/ons/taxonomy/index.html?nscl=International+Comparison+of+Productivity
4	Method changes in the 2011 Blue Book (G Everett, 2011)	http://www.ons.gov.uk/ons/guide-method/method- quality/specific/economy/national-accounts/methodology-and- articles/methods-changes-in-the-2011-blue-book.pdf
5	Volume Index of Capital Services	http://www.ons.gov.uk/ons/taxonomy/index.html?nscl=Volume+of+Capital+Services
6	Quality Adjusted Labour Input (QALI)	http://www.ons.gov.uk/ons/taxonomy/index.html?nscl=Quality-adjusted+Labour+Input
7	Multi-factor Productivity	http://www.ons.gov.uk/ons/taxonomy/index.html?nscl=Multi-factor+Productivity
8	UKSA assessment reports	http://www.statisticsauthority.gov.uk/assessment/assessment/assessment-reports/index.html
9	ONS Productivity Handbook	http://www.ons.gov.uk/ons/guide-method/user-guidance/productivity-handbook/index.html
10	Measuring Productivity - OECD Manual	http://www.oecd.org/dataoecd/59/29/2352458.pdf
11	Public Services Productivity (UKCeMGA)	http://www.ons.gov.uk/ons/taxonomy/index.html?nscl=Public+Service+Productivity
12	Labour Market Statistical Bulletin	http://www.ons.gov.uk/ons/rel/lms/labour-market-statistics/december-2011/statistical-bulletin.html
13	UK National Accounts	http://www.ons.gov.uk/ons/taxonomy/index.html?nscl=Main+Ag gregates+of+National+Accounts