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**Mark Pont, Assessment Programme Lead**

Jonathan Athow  
Director General for Economic Statistics  
Office for National Statistics  
(by email)

17 May 2019

Dear Jonathan

**EXPERIMENTAL LABOUR PRODUCTIVITY STATISTICS**

We recently completed our review of the compliance with the [Code of Practice for Statistics](#) of ONS's new suite of experimental labour productivity statistics

- [Labour productivity by industry division](#)
- [Region by industry labour productivity](#)
- [Breakdown of contributions, whole economy and sectors](#)
- [Labour productivity: sectional unit labour costs](#)
- [Quarterly regional productivity hours and jobs \(NUTS1\)](#)

We carried out the compliance check in order to review whether the National Statistics status of ONS's existing [labour productivity statistics](#) could be extended to include these supplementary data. We welcome your development of labour productivity data, which add additional insight to help understand the workings of the UK economy.

We found a great many positive aspects in the way that ONS produces and presents these statistics, and welcome ONS having already made a range of improvements in response to emerging findings from our review. We also acknowledge in our detailed findings annexed to this letter that ONS has already set out initiatives to further enhance these statistics. Once appropriate actions have been taken by ONS to address the requirements set out in this letter, we will review extending the existing National Statistics status to these new statistics.

I welcome the level of commitment and engagement from your team to enhance the value and quality of these statistics. This suite of statistics extends the reach and scope of labour productivity statistics to provide insights to more-detailed sectors within each country and region and into what contributes to changes in productivity. This is a great illustration of the principle of continually developing the statistics in order to provide the insights that users need. We found many positive examples of ONS's proactive approach to developing the insight from labour productivity data at UK and sub-UK levels. For example:

- ONS's [Review of international best practice in the production of productivity statistics](#) last year found many aspects of labour productivity statistics to be world leading but recommended several improvements, for example increased industrial granularity and faster production speeds. ONS's article [Improving estimations of labour productivity and international comparisons](#) demonstrates the high priority that ONS attaches to meeting users' needs for better statistics to make better decisions. The

range and quality of the labour productivity data contained within both the established bulletin and the additional experimental outputs are very impressive.

- ONS's knowledge of the enhancements required to be in full compliance with the Code of Practice has been particularly helpful. For example, the statistics team had already considered the challenge of balancing the need for fresh and insightful commentary against the need for clear and consistent messages in the *Labour productivity: UK* statistical bulletins.
- The increased breadth and granularity of these data allow users to answer questions such as:
  - To what extent do differences in regional productivity reflect differences in a region's industrial mix?
  - Are some countries and regions systematically more or less productive across all industries?
  - Are industry-by-region productivity differences converging or diverging over time?

We also identify a few areas that ONS should strengthen in line with the *Code* before being able to consider the extension of the National Statistics designation.

- Sharing a clear statement of data requirements with data suppliers significantly lowers the risk of data being delivered in an incomplete, untimely or incorrect manner. ONS should therefore create and share a clear statement of data requirements with the Ministry of Defence (MOD).
- It is essential that the team producing these statistics understands the quality of the administrative data that it uses, in order to manage associated risks and ensure that it can produce statistics of sufficient quality to bear the weight being put on them. Consequently ONS should conduct a risk profile analysis of the MOD data to enable it to provide itself and users with assurance about quality. This analysis should be underpinned by the principles set out in our [Quality assurance of administrative data toolkit](#).
- Ensuring that adequate information is published about the potential impacts of combining the production industries.

Thank you again for engaging effectively with us during this review. We will keep in touch with the statistical team as it undertakes these actions, and have agreed with the team that it will report back to us by the end of August 2019 about how it has addressed these areas. Once appropriate actions have been taken by ONS to address the requirements set out below, we will review the National Statistics status of these statistics.

I am copying this letter to Marianthi Dunn as the responsible statistician for labour productivity statistics and to Katherine Kent responsible for ONS's productivity statistics, and Grant Fitzner as the chief economist at ONS.

Yours sincerely



Mark Pont  
Assessment Programme Lead

## **Annex: Detailed Findings**

National Statistics status means that official statistics meet the highest standards of **public value**, are **high quality** and are produced in a way **worthy of trust** and comply with all aspects of the *Code of Practice for Statistics* (the *Code*). We have undertaken this review to consider whether these additional productivity data meet the required standard to extend the National Statistics designation of ONS's existing suite of labour productivity statistics to these additional data. We focused our review on five areas:

- Being innovative and improving the statistics – we wanted to look into the reasons behind the introduction of these new statistics
- Presenting the statistics clearly and providing authoritative insights – our desk research suggested that the data had the potential to add authoritative insights but we were curious about how these would be presented to users
- Suitable data sources – we were aware that ONS sourced some of its data from administrative sources and wanted to establish how it assured itself that these sources were suitable
- Sound methods – the distinguishing feature of these statistics is the disaggregation into regions and industries and we wanted to establish that the methods for making the disaggregated estimates are sound
- Assured quality – we are aware of the volume of data in these new statistics and wanted to establish the extent of robust quality assurance of the data and statistics

We found many positive aspects in the way that ONS produces and presents these statistics. We also identified areas where ONS should strengthen its practices in line with the *Code* to be designated as National Statistics.

We welcome ONS having already made a range of improvements in response to emerging findings from this compliance check.

### **1. Being innovative and improving the statistics**

ONS has been proactive in its response to the renewed interest shown in productivity policy by many commentators by improving the breadth and scope of its published regional and country productivity data. In January 2017, ONS published estimates of labour productivity on a regional and country basis, at various levels of geography (for example at NUTS1 and NUTS2 levels). In April 2017, ONS published experimental estimates of quarterly regional labour input consistent with the way such input is measured at the UK level. From April 2017, ONS expanded the data that it makes available to users to include annual industry-by-region labour productivity measures. The development of an industry breakdown for each of the UK's countries and regions allows users to drill down for a more detailed analysis than previous datasets permitted. These data support more-detailed investigation of trends in labour input and labour productivity for many industries at a sub-UK level, using information about the jobs and hours worked in each country and region.

These new data interest a broad range of users within and beyond government, particularly the UK's devolved administrations and industry groups, who appreciate the increased geographical granularity. These data allow users to answer questions which will allow them to make better decisions, for example:

- To what extent do differences in regional productivity reflect differences in a region's industrial mix?

- Are some countries and regions systematically more or less productive across all industries?
- Are industry-by-region productivity differences converging or diverging over time?

## 2. Presenting the statistics clearly and providing authoritative insights

Statistics and data should be presented clearly, explained meaningfully and provide authoritative insights that serve the public good. The wealth of labour productivity data at the UK and at the detailed level presents a challenge to ONS in effectively providing comprehensive insights. ONS has recognised this and is proposing to release three separate labour productivity bulletins: (i) a regional/industrial bulletin, (ii) a bulletin for unit and sectional costs and (iii) a bulletin considering the headline national productivity. These new bulletins were presented to ONS's annual productivity forum in March 2019 and user feedback has been gathered to shape the final format. We commend ONS on coming up with different platforms to meet the different users' needs. By continuing to engage with users constructively beyond March's productivity forum, ONS will ensure that it remains abreast of changing user needs and insights and enable it to continue to respond to users' changing needs.

## 3. Suitable data sources

ONS uses two sets of administrative data in addition to the extensive survey data that it produces to compile these statistics. One dataset is the HM Forces regional job splits, which ONS downloads from the [Ministry of Defence \(MOD\) website](#) directly. Secondly, ONS takes statistics on Government Supported Trainees (GST) from the Labour Force Survey (LFS).

The risk of errors and delays increases substantially when misunderstandings with data suppliers occur. These risks are greater when the data suppliers are outside of the direct control of the statistics producer. To improve resilience and reduce the likelihood of these risks occurring **ONS should ensure that a written statement of data requirements is shared with the MOD. Given the obvious sensitivity around these MOD data it will be necessary for ONS to collaborate closely with the MOD on this.**

It is essential that the statistics team understands the quality of the administrative data that it uses, in order to manage associated risks and ensure that it can produce statistics of sufficient quality to deliver the insights that users need. **Consequently ONS should conduct a risk profile analysis of the MOD data to enable it to provide itself and users with assurance about quality. This analysis should be underpinned by the principles set out in our [Quality assurance of administrative data toolkit](#).**

## 4. Sound methods

The statistical methods adopted by ONS to produce these labour productivity statistics are consistent with internationally recognised best practice and have been produced in accordance with the European System of Accounts 2010 (ESA2010) framework. They are based on well-established and recognised methodologies.

A [review](#) of international best practice of productivity statistics by London Economics and DIW Econ considered ONS to be a leader in terms of producing good labour productivity data and is among only six National Statistics Institutes that produce estimates of labour productivity for different regions. The UK is among only three countries that produce industry-by-region estimates of labour productivity and ONS is one of eight producing

quarterly labour productivity statistics. These data feature a robust time series which extends back to 1997.

We are also pleased to note that when calculating labour productivity, ONS uses measures that take into account the location of the economic activity and are not based on headquarters locations, meaning estimates are the best available representations of what's happening in different geographies. Additionally, by adopting the data sources that ONS uses for these statistics, this new suite of productivity data yields a sample size robust enough to produce regional jobs estimates split by industry which provide the insights that users need.

ONS reports the labour productivity of agriculture, fishing and forestry as part of the wider grouping of production industries, rather than separately. This has the potential to mask quite different movements in those sectors from the rest of the production sector. While we are content with ONS's reasons for combining the production industries into a single labour productivity figure for each country and region<sup>1</sup>, **ONS should consider how it will make users aware of the potential impacts of combining the production industries.**

Estimates of Gross Value Added (GVA) by industry and region includes imputed rentals in real estate activities (sector L) which, while consistent with the national accounts, causes issues when conducting productivity analysis. Imputed rental is accrued from historically acquired capital assets (housing). Therefore, no labour input is engaged in the production of imputed rental output and as such, a labour productivity measure for imputed rentals (or an industry dominated by them) can be misleading. We are pleased to note that the latest Productivity Development Plan (*action point LP2.1*)<sup>2</sup> mentions the development work that ONS is planning on labour productivity data for the real estate industry, excluding imputed rental.

## 5. Assured Quality

We are pleased to note that ONS has produced an article to accompany its [latest industry by region](#) bulletin which discusses the impact of introducing the balanced measure of Gross Value Added (GVAB) into productivity statistics. Statistics should be produced to a level of quality that meets users' needs. It is important that the strengths and limitations of new methodologies such as GVAB should be considered in relation to different uses and clearly explained alongside the statistics. It's also important that scheduled revisions or unscheduled corrections that result from errors are explained alongside the statistics, being clear on the scale, nature, cause and impact. We are pleased to note that in the April 2019 UK labour productivity [bulletin](#) (covering October to December 2018) ONS discusses the various revisions that have taken place since the previous quarter. This improves insight and reassures users about the quality and trustworthiness of the data.

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<sup>1</sup> Labour productivity statistics for agriculture, forestry and fishing industry (section A) and Construction (section F) are published on an annual basis, rather than quarterly. There is therefore a balance between the level of detail and frequency of publication and the quality of the statistics published

<sup>2</sup><https://www.ons.gov.uk/economy/economicoutputandproductivity/productivitymeasures/articles/productivitydevelopmentplan/2018to2020>