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**Ed Humpherson, Director General for Regulation**

Rt Hon Mel Stride MP
Chair, Treasury Committee
House of Commons
London
SW1A 0AA

17 May 2021

Dear Mr Stride,

I write in response to the Treasury Committee's call for evidence for the inquiry considering *Jobs, growth, and productivity after coronavirus.*

The Office for Statistics Regulation (OSR) is the independent regulatory arm of the UK Statistics Authority. We provide independent regulation of all official statistics produced in the UK, including those in Devolved Nations and the NHS[1]. Our regulatory work is underpinned by the Statistics and Registration Service Act 2007.

We set the standards official statistics must meet through the statutory Code of Practice for Statistics[2]. We ensure that producers of official statistics uphold these standards by conducting assessments against the Code. Those which meet the standards are given National Statistics status, indicating that they meet the highest standards of trustworthiness, quality, and value. We also report publicly on system-wide issues and on the way statistics are being used, celebrating when the standards are upheld and challenging publicly when they are not.

Within this evidence, we have examined the adequacy of economic statistics for capturing growth in the modern economy. Particularly, we have considered the lessons to be learned by statistical producers from the pandemic about the measurement of economic activity.

I look forward to seeing the conclusions of your inquiry. Please do not hesitate to contact me if I can be of any further assistance.

Your sincerely,

Ed Humpherson
Director General for Regulation

[1] https://uksa.statisticsauthority.gov.uk/about-the-authority/what-we-do/uk-statistical-system/producers-of-official-statistics/

[2] https://code.statisticsauthority.gov.uk/

# Office for Statistics Regulation (OSR) written evidence: Jobs, growth and productivity after coronavirus, May 2021

## Overview

1. Strong statistical leadership in a system willing and prepared to be flexible and innovative in the face of new data demands is essential for ensuring government statistics meet user needs and serve the public good. The Office for National Statistics (ONS) should aim to build on its good performance through the pandemic and ensure that the same agile and innovative use of alternative data sources and improvements to timeliness of its outputs is carried through to its post-pandemic work.
2. There is a want and need from users for a measurement of growth beyond GDP that considers other assets, as it does not account for the depreciation of assets, such as the natural environment. As our primary measure of economic success, GDP is useful as a short-term measure but many are asking for more comprehensive measures of growth which help policymakers to make longer-term decisions and investments.
3. A network of regional statistical agents, akin to the Bank of England's regional agents, can help provide the ONS and others with better insight into regional economic issues that should be considered to enrich regional data.
4. In adopting international best practice, users should exercise caution in making international comparisons of real GDP growth currently. ONS has recommended that nominal GDP estimates are currently more internationally comparable, as they are not affected by the differences in public sector output measurement. Whilst ONS is a leader in measuring GDP, there are still known areas which need to be addressed.
5. There is debate about what is seen as productive and not seen as productive in the UK economy – 'the production boundary'. There are several factors contributing to the 'productivity puzzle', but one element may lay in the way digital technologies make activity at home part of the productive economy.

## Statistical Leadership

6. Strong statistical leadership[3] is essential to ensure that statistics serve the public good, which in the context of the pandemic required statistical producers to make data and analysis available to policymakers quickly to address the immediate and the longer term impacts on the economy. ONS responded well to this challenge, engaging with their users, and producing the data they required.
7. ONS published the first of its faster indicators of economic activity[4] publications in April 2020, one month after the UK first went into lockdown. The publication contained a series of economic indicators, which assisted policymakers with understanding the industrial impact of the pandemic and gauging the level of overall economic activity through the analysis of traffic flow data.
8. As outlined to users, the statistics were considered as experimental indicators in line with OSR's COVID-19 guidance[5] to statistical producers. These new indicators reflected the

[3] https://osr.statisticsauthority.gov.uk/wp-content/uploads/2021/02/Statistical-leadership-Making-analytical-insight-count.1-1.pdf

[4] https://www.ons.gov.uk/economy/economicoutputandproductivity/output/datasets/economicactivityfasterindicatorsuk

[5] https://osr.statisticsauthority.gov.uk/covid-19-changes-to-statistics/

trade-off between their prompt availability versus the corresponding impact on accuracy, a balance that users told us they appreciated to ensure they had readily available information for decision making.

9. During May 2020, ONS proactively published information for its users on the work it was doing to ensure that its headline economic indicators, including Consumer Price Inflation[6], Gross Domestic Product[7] and Labour Market Statistics[8], continued to be produced, ensuring that policymakers got this vital information to respond to the economic impacts of the pandemic.

10. As well as meeting the needs of policymakers, ONS has sought to communicate the story of how the economy and labour market have been impacted by the pandemic more widely. It has released a series of blogs[9] which draw out the key messages and explain the significance of changes in the data, in a way which can be understood by less expert users.

## Alternative Data Sources

11. Assessing the scale of economic change, when the usual sources of data were impaired by COVID-19, presented a major challenge to statistical producers. However, intensive use of alternative data sources including administrative and new survey data helped ONS enhance the timeliness of statistical production throughout the pandemic. Many of the statistics contained in the ONS's faster indicators publication were produced using administrative data, including indicators on businesses' turnover using HMRC VAT returns improving their timeliness and availability to users. These indicators helped policymakers understand the immediate impacts of the pandemic on the performance of business.

12. These statistics were complemented by data gathered using new surveys and existing surveys augmented to take account of the COVID-19 pandemic. The Business Impact of COVID-19 Survey (BICS)[10], launched in March 2020, provided users with data on the impact of the pandemic on business operations, including the status of employees following the introduction of the UK Government furlough scheme.

13. The economic impact of the pandemic has also been captured via the ONS's Management and Expectations Survey[11], the results of which help to examine the economic impact of COVID-19 through its coverage of business inputs, outputs, and process. The challenge of sourcing data which would usually be through face-to-face surveys has given the ONS the push to accelerate its plans to use new sources of data for its labour market statistics.

14. ONS has worked closely with HMRC to produce Pay As You Earn (PAYE) Real Time Information (RTI) experimental estimates of earnings and employment[12], which provide a

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[6] https://www.ons.gov.uk/releases/consumerpriceinflationukmay2020

[7] https://www.ons.gov.uk/economy/nationalaccounts/uksectoraccounts/articles/coronavirusandtheeffectsonukgdp/2020-05-06

[8] https://www.ons.gov.uk/releases/uklabourmarketmay2020

[9] https://blog.ons.gov.uk/2021/03/23/exploring-how-the-uk-population-and-workforce-are-changing-in-the-pandemic/

[10] https://www.ons.gov.uk/economy/economicoutputandproductivity/output/datasets/businessimpactofcovid19surveybicsresults

[11] https://www.ons.gov.uk/surveys/informationforbusinesses/businesssurveys/managementandexpectations

[12] https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/earningsandworkinghours/bulletins/earningsandemploymentfrompayasyouearnrealtimeinformationuk/april2021

timely snapshot of payrolled employees using admin data. ONS has also drawn on new innovative data sources to address known data gaps, such as vacancy data in which it has used data from a job search engine – Adzuna – to develop a set of experimental online job advert estimates[13] covering the UK job market.

## Flexibility and Innovation

15. Throughout the pandemic statistical producers needed to innovate quickly and to change their business operations to meet the information demands of users and economic policymakers. ONS was successful in meeting this short-term need and will now need to ensure that this same agility and innovation is introduced to its longer term measures of economic performance to improve the timeliness of these statistics, given the significant structural impacts of the pandemic on issues such as business operations, investment, productivity and employment.
16. Greater use of administrative data and consideration of other existing data sources, in line with ONS's five-year business plan[14], will not only remove burden from businesses, but enable policymakers to address these structural issues in a timelier manner. The ONS has been successful this year in improving the timeliness and frequency of longer-term measures of economic performance, such as business births and deaths[15], through more intensive use of VAT administrative data. This innovation has been crucial for policymakers concerned with understanding the impact of the pandemic on different industries and the design of policy to minimise the displacement of economic capital and labour across industrial sectors. Here again, users were content to accept the improvement in timeliness of these data at the cost of degrees of accuracy.
17. ONS should aspire to improve the timeliness of the outputs of its annual surveys including, for example, the Annual Business Survey[16], to enable policymakers to more readily evaluate the structural economic impacts of the pandemic. The ONS has also used the pandemic as an opportunity to bring forward its transformation plans for labour market statistics, through the development of its online Labour Market Survey[17].
18. Reducing the survey burden on business will also free up ONS capacity to address the granular data needs of local economies.

## Regional Economic Agents

19. We expressed to the Treasury Select Committee in our evidence[18] as part of its inquiry into Regional Imbalances[19] that it may be worth considering a network of regional statistical observatories, akin to the Bank of England's regional agents, that can help provide the ONS and others with better insight into regional economic issues. The Bank makes its regional agencies work successfully with just a couple of people in each

[13] https://www.ons.gov.uk/economy/economicoutputandproductivity/output/datasets/onlinejobadvertestimates

[14] https://www.ons.gov.uk/aboutus/transparencyandgovernance/businessplan

[15] https://www.ons.gov.uk/businessindustryandtrade/business/activitysizeandlocation/bulletins/businessdemographyquarterlyexperimentalstatisticsuk/apriltojune2020

[16] https://www.ons.gov.uk/surveys/informationforbusinesses/businesssurveys/annualbusinesssurvey

[17] https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/employmentandemployeetypes/methodologies/labourmarketsurveytechnicalreport

[18] https://uksa.statisticsauthority.gov.uk/submission/office-for-statistics-regulation-written-evidence-to-the-treasury-committee-as-part-of-their-inquiry-regional-imbalances-in-the-uk-economy/

[19] https://committees.parliament.uk/work/215/regional-imbalances-in-the-uk-economy/

region. ONS and other UK official statistical producers could tap into these local sources to enrich its official statistics.

## Capturing growth in the modern economy

20. Economic statistics in the UK could more adequately capture growth in the modern economy. However, it is not surprising that such statistics sometimes struggle to reflect the pace of change: almost all National Statistical Institutes (NSIs) are running to catch up with the developments in their economies. However, statistics from the ONS as the NSI and other statistical producers are more reflective of the modern economy now five years on from Sir Charles Bean's Independent Review of Economic Statistics[20] in 2016.
21. What has become clearer since the Bean Report is that there is a much wider concept of growth that people are interested in measuring. Since the publication of *Beyond GDP: Measuring What Counts for Economic and Social Performance*[21], there is even greater awareness that people want to measure growth beyond GDP, which is needed for short-run macroeconomic analysis and management. However, GDP is a very narrow measure of growth and for example, does not account for the depreciation of assets, including the natural environment. As our primary measure of economic success, GDP is useful as a short-term measure of economic growth but many are asking for more comprehensive measures of growth to help policymakers make longer term decisions.
22. The COVID-19 pandemic has, by necessity, shifted priorities and producers have had to shelve some of the work that they might have accomplished to capture the modern economy more completely. Unsurprisingly, policymakers are more focused on the short-term as described above. From the policy-making perspective, economic statistics need to capture growth in economic welfare over more than the short-run.

## A sustainable economy

23. Professor Partha Dasgupta's report *The Economics of Biodiversity*[22] makes it clear that our economies, livelihoods, and well-being all depend on our most precious asset: nature. Professor Dasgupta in his report says our unsustainable engagement with nature is endangering the prosperity of current and future generations. The solution starts with understanding and accepting a simple truth: our economies are embedded within nature, not external to it. We need to change how we think, act and measure success, and change our measures of economic success to guide us on a more sustainable path. The question posed by the Committee talks about growth and it is important that an appropriately broad interpretation is adopted.
24. The Dasgupta Review shows that to judge whether economic development is sustainable, an inclusive measure of wealth is needed. By measuring our wealth in terms of all assets, including natural assets, 'inclusive wealth' provides a clear and coherent measure that corresponds directly with the well-being of current and future generations. This approach accounts for the benefits from investing in natural assets and illuminates the trade-offs and interactions between investments in different assets.

[20] https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/507081/2904936_Bean_Review_Web_Accessible.pdf

[21] https://www.oecd.org/statistics/measuring-economic-social-progress/

[22] https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/957292/Dasgupta_Review_-_Abridged_Version.pdf

25. The OSR set out in our review of the public value of devolved public finance statistics[23] our view that data should be expected to present a fuller picture of sustainability of public finances by taking an intergenerational view. And in our review of ONS's Natural Capital Accounts we found many positives in these statistics, particularly in their breadth, which enhance their value and relevance to a wider range of users. We also found several ways we considered ONS could further enhance the trustworthiness and value of these statistics which ONS is expected to address.

## Inclusive Growth

26. The Inclusive Growth Commission (2017)[24] proposed four key ways for putting inclusive growth at the heart of public policy and finance for making inclusive growth a working definition of economic success which meant modernising involving statistics, including establishing inclusive growth as a regular official statistic by publishing a quarterly national measure of inclusive growth alongside GDP. Realising this ambition will require investment in mining new data sources, data gathering and in data analysis.
27. In our letter to the Committee[25] as part of its inquiry into regional imbalances we identified statistics on inclusive growth as among the data gaps we saw at this level. We will continue to work with data suppliers, statistics producers and statistics users to assess the extent to which these statistics serve the public good and how they can be developed to meet unmet needs going forward.

## Measuring GDP

28. Whilst the ONS is a leader in measuring GDP there are still known areas which need to be addressed. Below we have set out areas that our recent work has highlighted. This is not intended to be a comprehensive list but illustrative of some of the areas that are still being worked on to provide better estimates of short-term economic growth in the UK.

### *International Comparability*

29. In some correspondence with a statistics user in January 2021[26] we noted that ONS is adopting international best practice, particularly in respect to estimating real terms non-market output (mainly in the public sector) when many advanced economies have not done so. ONS suggests[27] users exercise caution in making international comparisons of real GDP growth currently. ONS has recommended that nominal GDP estimates are currently more internationally comparable, as they are not affected by the differences in public sector output measurement.

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[23] https://osr.statisticsauthority.gov.uk/wp-content/uploads/2019/05/Public-Value-Devolved-Public-Finance-Statistics-Part-2.pdf

[24] https://www.thersa.org/reports/final-report-of-the-inclusive-growth-commission

[25] https://uksa.statisticsauthority.gov.uk/wp-content/uploads/2020/07/Office-for-Statistics-Regulation-regional-imbalances-written-evidence.pdf

[26] https://osr.statisticsauthority.gov.uk/correspondence/ed-humpherson-to-simon-briscoe-concerns-regarding-ons-gdp-statistics-during-the-pandemic/

[27] https://www.ons.gov.uk/economy/grossdomesticproductgdp/articles/internationalcomparisonsofgdpduringthecoronaviruscovid19pandemic/2021-02-01#coronavirus-and-uk-gdp

*Making better distinctions between final output and intermediate output*

30. One of the key determinants of growth is making the distinction between intermediate and final output. The ONS relies on many sources to make this distinction and is heavily reliant on business surveys among such sources. One area where measurement of business investment might be improved is in own-account software. Own-account software forms part of Gross Fixed Capital Formation (GFCF). As software developed for own-final use is not traded on the market, a purchaser's price cannot be established, and the recommended method is therefore to estimate by costs of production. The proportion of own-account software expenditure reported by businesses to ONS to intermediate consumption (around half of the total expenditure) is suspect. There are tax benefits in writing off expenditure on own account software rather than booking it as investment. Given the importance of own-account software to economic growth statistics as it accounts for around 10% of business investment, around 7% of GFCF and around 1% of GDP, it is an example of where economic growth may be being mismeasured.

*Research & Development*

31. It has been reported[28] that the UK underperforms on traditional innovation indicators and Governments have deployed policy and structures to remedy this. For example, statistics suggest that the UK performs poorly on business expenditure on research and development (R&D) and on the production of patents. As a result, policymakers across the UK have sought to drive improvements in these areas, and have focused on incentives for scientific and technological R&D, support for high-tech manufacturing firms, increasing public investment in the science base and improving links between universities and industry.
32. However, traditional indicators such as business expenditure on R&D ignore major sectors of the UK economy like financial services and oil and gas production. Many commentators believe that R&D spend is a poor indicator of innovation for UK business. There are methodological issues with these data and the Organisation for Economic Co-operation and Development (OECD) suggests that caution should be exercised when using them.

*Productivity – what's not seen as productive in our economy*

33. There is debate about what is seen as productive and not seen as productive in the UK economy – 'the production boundary'. In principle it is clear: anything that is marketed is inside, including activities mediated through the public sector, and anything not marketed is outside. For example, when your child goes to school the learning in school is seen as productive and counted in GDP. However, if your child is home-schooled that is not seen as productive.
34. The modern economy is often measured in statistics using transactions-based data founded on a financial accounting system from the 14th century. The modern economy is far less organised around transactions. Diane Coyle's research[29] for the Economic Statistics Centre of Excellence (ESCoE) sets out a taxonomy of the range of potential measurement artefacts arising from digital innovations. It also specifically considers digitally enabled substitutions in activity across the production boundary. She argues that these, along with other substitutions occurring within the production boundary, may be

[28] https://media.nesta.org.uk/documents/the_innovation_gap.pdf

[29] https://www.escoe.ac.uk/blurring-line-digital-technologies-disrupting-measurement-gdp/

making a meaningful contribution to the productivity puzzle as measured using existing statistical definitions and transactions-based data.

35. There are many examples in our economy of disintermediation where work that previously used to be in the transactional economy is now carried out in the household. These include holiday bookings previously carried out and paid to travel agents, insurance previously brokered by insurance brokers and photograph development.

36. Each of these in themselves might be small in their effects but combined with other types of substitution inside the production boundary might potentially add up to a significant measurement impact on the GDP deflator and real GDP. There are several factors contributing to the puzzle, but perhaps one element lies in the way digital technologies are making activity at home part of the productive economy in a way they have not been since the Industrial Revolution. Measurement is one of the issues at the heart of the productivity puzzle – for example, in the contrast between GDP per hour worked in nominal and real terms; the growth of the former has slowed since 2008, while the latter has flat-lined.

37. This implies that an explanation of the 'puzzle' needs to explore the price/volume split to examine the clear change in the behaviour of the deflator in the past decade. Digital activities and business models are affecting the measurement of GDP, on existing national accounts definitions, in multiple ways.

38. On 17 May 2021, we published our assessment of some of ONS's suite of productivity statistics in which we required ONS to enhance these statistics to better answer questions about the UK's performance in improving productivity[30]. We also develop a rolling programme of regulatory interventions[31] designed to monitor and assess statistics measuring economic growth at the different levels of the UK. This helps us in our role of championing the improvement of these statistics to meet ever higher demands made upon them by decision makers and the public.

**OFFICE FOR STATISTICS REGULATION, MAY 2021**

[30] https://osr.statisticsauthority.gov.uk/publication/assessment-report-uk-productivity-statistics/

[31] https://osr.statisticsauthority.gov.uk/our-regulatory-work/