
Professor Sir Ian Diamond | National Statistician

Harriet Baldwin MP
Chair, Treasury Committee
House of Commons
London
SW1A 0AA

5 October 2022

Dear Ms Baldwin,

Thank you for your letter of 14 September 2023 regarding revisions within Blue Book 2023. To take your four points in turn:

1. An overview of the main drivers of these revisions, and whether there were particular circumstances (including those arising from the pandemic) in 2020 and 2021 that made early estimates of GDP especially uncertain.

As I outlined in the Financial Times recently, The UK's official economic statistics are rightly seen as among the world's best¹. This includes the recent upgrade of our official estimates for economic growth in the pandemic years of 2020 and 2021.

It is certainly true that the large shifts in activity, and the means of delivering that activity in many cases, made it harder for all statistical agencies to measure economic activity during the pandemic. But it is equally true that the larger revisions we have seen for our 2020 and 2021 GDP estimates are proportionally in line with the much larger declines and growths seen over these periods as well.

The main drivers of revision in our 2020 and 2021 GDP estimates come from these changes in activity. For example, the health service had increased costs to deliver a reduced amount of output (e.g. protective equipment, and extra staff) during 2020 which increased the intermediate consumption and decreased the value added of the health sector. During 2021 these intermediate consumption costs continued to rise, but more slowly, while output volumes saw a massive increase from the return of mainstream health activities such as elective surgeries but also from the COVID vaccination programme and so value added then grew strongly.

Secondly retailers and wholesalers also changed the way they operated with specialist stores being forced to close or be limited to click and collect, and a much larger proportion of transactions were completed on-line. This again changed the retail and wholesale margins element in 2020 and then this partially swung back the other way in 2021 as retailers, especially those selling clothing and textiles saw a strong recovery in 2021.

The third driver of revisions was inventories data, where our annual, more complete,

¹<https://www.ft.com/content/f7c6f438-07a7-4a3b-b26c-159f0b35c794>

data sources gave information that businesses undertook more stock building that previously thought at the start of the pandemic when restrictions were quickly introduced. For more detail, please see our article² on the 1st September 2023.

2. An explanation of what has been learnt from these revisions about what may have been wrong with the earlier estimates, and what improvements the ONS will implement from what it has learnt.

Our early monthly and quarterly estimates for GDP followed the standard ONS procedures using the available ONS data sources. The challenge was the sheer scale of fundamental change in the economy in such a small space of time. The ratio of intermediate consumption to final output is usually very stable, and as a result ONS did not have any data sources for changes to this ratio for periods beyond the latest supply and use balanced year, which was 2018 at the time the pandemic started.

We have now sourced intermediate consumption data on a more timely basis for the health service with quarterly and annual data available within a month or two of the reference period. We are also investigating the use of administrative tax data (VAT) on purchases by businesses as a means of identifying changes in the intermediate consumption ratio more quickly across industry.

We have welcomed the recently announced review by the Office for Statistics Regulation³, and look forward to their recommendations as one of the themes relates to “Potential improvements to early estimates of GDP enabled through enhanced access to data”.

3. An outline of whether the ONS expects similarly large revisions to GDP data for 2022, in either direction, and more broadly whether the ONS sees revisions of this size as exceptional or typical.

The revisions profile of GDP estimates for 2022 and for the first half of 2023 were published on 29 September in the Quarterly National Accounts. There was little to no revision to previously published GDP from 2022 onwards, and we saw only 1 out of the last 6 quarters have been revised. The quarterly growth rate of GDP across all of 2022 was unrevised, while growth in 2023 Q1 was revised up 0.2 percentage points and 2023 Q2 was unrevised. With this release, we observed that revisions for that period are more typical of the pre-pandemic era.

As part of our continual improvement, we have already implemented the new health intermediate consumption data to reduce the potential for revision in this large sector of the economy. While other work looking at wider intermediate consumption

²<https://www.ons.gov.uk/economy/grossdomesticproductgdp/articles/impactofbluebook2023changesongrossdomesticproduct/2023-09-01>

³ <https://osr.statisticsauthority.gov.uk/correspondence/ed-humpherson-to-mike-keoghan-revisions-of-estimates-of-uk-gross-domestic-product-gdp/>

continues, we have proactively reviewed areas such as rail transport and air transport to ensure that the intermediate consumption ratio of 2021 does not apply

directly to 2022 as well, where we can see clear evidence of a recovery in those sectors. As part of the OSR review of GDP, ONS has committed to provide [additional revision analysis](#)⁴ of our GDP estimates in October 2023.

4. Given the ONS notes that it has completed its revisions to GDP using a Supply and Use Table framework ahead of many other countries, what it expects may happen in comparator countries when they undertake their own similar analysis.

Each country will follow different revision policies and practices, which can result in their estimates being revised at a later date according to their own needs. The timing and impact of revision changes will depend on data availability and magnitude, with large annual structural surveys being the data source needed to make detailed product and industry changes. These annual data sources come with lags on timeliness, often being available up to 2 or 3 years later.

We have now seen revisions to GDP estimates published by other countries. As we previously announced, the 2021 GDP estimates for the UK were revised to 8.7 percent growth from our initial estimate of 7.6 percent growth, a revision of +1.1 percentage points. The Spanish Statistical Agency⁵ has now published 6.4 percent growth in GDP for 2021, compared with the previous estimate of 5.5 percent, a revision of +1.1 percentage points. The Netherlands⁶ have now published 6.2 percent growth for 2021, revised from an initial estimate of 4.9 percent, a revision of +1.3 percentage points. Italy⁷, have now published 8.3 percent growth for 2021, revised from an initial estimate of 7.0 percent, a +1.3 percentage point revision. All are a similar magnitude of upwards revision for 2021 as observed in the UK context. Conversely, the United States⁸ have now published 5.8 percent growth for 2021, compared to a previous estimate of 5.9 percent growth, a revision of -0.1 percentage points. This highlights that revisions can differ across countries.

Please do let me know if you have any further questions about this topic or if I can be of assistance to the Committee on any other matter.

⁴ <https://osr.statisticsauthority.gov.uk/correspondence/mike-keoghan-to-ed-humpherson-revisions-of-estimates-of-uk-gross-domestic-product-gdp/>

⁵ https://www.ine.es/dynsgs/INEbase/en/operacion.htm?c=Estadistica_C&cid=1254736177057&menu=ultiDatos&idp=1254735576581

⁶ <https://www.cbs.nl/en-gb/longread/diversen/2023/revisions-to-gdp-and-gni-in-2021-and-2022?onepage=true>

⁷ <https://www.istat.it/en/archivio/288209>

⁸ ONS own calculations based on published US data from www.bea.gov



**UK Statistics
Authority**

Government Buildings
Cardiff Road
Newport
NP10 8XG

Adeiladau'r Llywodraeth
Heol Caerdydd
Casnewydd
NP10 8XG

Tel: 020 8039 0313
E-mail: national.statistician@statistics.gov.uk
www.statisticsauthority.gov.uk

I am copying this letter to Rt Hon Greg Clark MP, Chair of the Science, Innovation and Technology Committee, and William Wragg MP, Chair of the Public Administration and Constitutional Affairs Committee.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'Ian Diamond'.

Professor Sir Ian Diamond