Office for
National Statistics

Article

New Beyond GDP measures for the UK: a workplan for measuring inclusive income

Planned work, as well as timeline estimates, for projects feeding into a new a measure of "inclusive income", aligned with the concept of "inclusive wealth".

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1 . Overview of reasons for developing new Beyond GDP measures

Gross domestic product (GDP) is a powerful indicator centred around the market economy, but a poorer measure of broader economic welfare. The reasons for this have been discussed extensively since before the National Accounts - which include GDP - were first formalised in 1948. However, while the international community has developed multiple alternatives, few have fully gained traction with users.

2 . Our current position

In 2019 researchers at the Office for National Statistics (ONS) published a paper on Gross domestic product (GDP) and Welfare: a spectrum of opportunity, through the Economic Statistics Centre of Excellence. This overcame one of the most significant barriers to developing a measure to better meet user needs using pre-existing data; that is, how to bring together a "spectrum" of measures, including some single-number indices, such as GDP, and some sets of multiple indicators often visualised through dashboards (like the Sustainable Development Goals (SDGs) or the UK climate change statistics portal). This identified an opportunity to provide new "single-number indices", going wider than GDP in capturing measures that provide meaningful information on the range of benefits people receive both from the market economy and other domains including the environment.

In 2021, a second paper on GDP and welfare: empirical estimates of a spectrum of opportunity was published. It provided empirical estimates for this series of new measures under the "spectrum" framework, primarily using data already published by the ONS, in addition to early experimental atmospheric degradation data (which the ONS will look to improve upon in the future).

This publication presents a workplan to build on the 2019 and 2021 papers, outlining a timeline to bring planned publications of ONS data and analysis together to compile fresh estimates of measures of "inclusive income". These measures align with the "inclusive wealth" concepts described in the Dasgupta Review of the Economics of Biodiversity, but seek to benefit from using measures of flows of benefits arising from capitals, which can be easier to measure, rather than the stock values themselves.

We also outline research plans to improve existing data. This includes how to improve timeliness by exploiting new nowcasting techniques in particular areas and delivering supplementary data, derived from the published series, which can expand the annual series into either a six-monthly or quarterly series. This can be published with initially around a five-quarter lag. But once methods have been assured our hope is to shorten this lag further.

Why GDP is used to measure economic welfare

It is widely recognised that GDP is often used as a measure of welfare despite being a poor conceptual fit. What is less frequently considered is why it is so widely used for these purposes, despite these recognised weaknesses. The simple answer is that it also has certain strengths and, for many users, these strengths outweigh the weaknesses.

At its core, those strengths are that:

- it is a coherent single measure that unambiguously either goes up, down or stays the same - there is therefore a "definite signal" from the data

- it is published frequently and quickly after the relevant time period, meaning there is a "timely signal" from the data

- because it can be decomposed, or broken down, into its component parts we can explain why it has grown, shrunk or remained unchanged; in essence it contains an "explainable signal"

While there is often an argument that it is impossible to address well-being or welfare within a single indicator, we must consider whether that is a theoretical, empirical or user-driven conclusion.

User needs

In terms of user needs, we can see a revealed preference for single measures. GDP is often used despite a recognition of its weaknesses. While alternatives such as SDGs and well-being dashboards are increasingly used, there is a substantial group of users who have chosen not to use these, indicating their preference for a single indicator of welfare.

Theoretical feasibility

The National Accounts provide a framework for unifying diverse data, covering the income derived from heterogenous goods production, paid services production, unpaid government production, sweeping up imputed rentals from own-occupied housing, illegal activities such as drugs and prostitution, and more. The argument that we can bring together all this diversity, but we cannot include unpaid household cooking when we can include paid cooking in a restaurant, or that we can include the benefits we receive from a tree planted by a human, but not a tree growing in an unmanaged way in a forest, appears to underplay the potential to recycle these existing methods and techniques.

Empirical data

In terms of empirical data availability, the UK stands out for the richness of data sources it has invested in creating, leaving it feasible, within the next couple of years, to populate inclusive income measures, denominated in common terms - that is in monetary values - which can legitimately be combined without the introduction of subjective weights.

3 . What we propose to publish

There are two core new metrics the inclusive income dataset will contain, alongside the metrics it will draw together from other publications. We have revised some labels, when compared with the initial research work, as we move into routine production to simplify and make clearer the distinction from existing measures.

Gross inclusive income (GII)

This will equate to gross domestic product (GDP) plus the flows of additional wider economic benefits from unpaid household service activity, the environment (natural capital), human capital, and the value of improved public service outcomes. In the research phase this was labelled gross domestic income as we consider the benefits from these in terms of being equivalent to additional income.

Net inclusive income (NII)

This will equate to GII plus the depreciation or depletion of all assets brought into scope through the production of the additional components added to GDP to get to GII. To put this in National Accounts terms; the asset boundary is moved in parallel to the production boundary as it moves from GDP to GII. In other words, NII will capture both, for example, the benefits we accrue from trees, such as carbon sequestration, and addressing other pollutants, absorbing floodwater, timber and leisure, but also the losses when the stock of trees is depleted, either through felling, storm damage or climate change. In the research phase this was labelled augmented Net National Disposable Income (NNDI).

4 . When we propose to deliver research and estimates

Data availability is the main factor determining our ability to produce new statistics. To create these new measures we require data from the following sources:

- gross value added (GVA) from National Accounts, divided into market and non-market sectors

- quality adjustment uplifts for the non-market sector from our [public service productivity](#) publications

- unpaid household work estimates, and durable household goods estimates from parts of our [satellite Household Accounts](#)

- flows of benefits from, and measures of creation and depreciation/depletion of, natural capital - drawn from the [Natural Capital Accounts](#), part of the satellite [Environmental Accounts](#)

- measures of creation and depreciation or depletion of human capital, with stocks data being drawn from the [satellite Human Capital Accounts](#); data on flows of benefits will be derived from the National Accounts

- measures on uncapitalised intangible assets, drawn from our experimental broader [intangible assets publications](#)

- measures of atmospheric degradation, currently created as an ad-hoc series; there is currently international negotiation on how best to measure this, so this series may change if new methods are agreed upon

We need all of these components to calculate the first full estimates of extensions of the annual series, which we currently have for 2006 to 2016. As such, we anticipate the publishing dates from these components is as follows, delivering the following dates for the publication of updates of the gross inclusive income (GII) and net inclusive income (NII) series.

Data source and its expected or actual publication time

Gross value added

- 2017 to 2021: already available.

- 2022: to publish in Quarter 3 (July to Sept) 2022.

Non-market quality adjustments

- Already available for 2017 to 2020.

- 2021: to publish in Quarter 1 (Jan to Mar) 2023.

- 2022: to publish in Quarter 1 (Jan to Mar) 2024.

Unpaid household work

- 2017 to 2021: to publish in Quarter 4 (Oct to Dec) 2022.

- 2022: to publish in Quarter 4 2024 with experimental online time-use survey-based estimates for 2020 to 2022, aiming to publish by Quarter 4 2023.

Atmospheric degradation

- 2017 to 2019: Simple estimates already available, but new ONS methods are likely to supersede these.

- 2020 to 2022: Simple methods can be replicated, but we would prefer to use new estimates based on observed costs.

Other natural capital

- 2017 to 2019: already available.

- 2020: to publish in Quarter 4 2022.

- 2021: to publish in Quarter 4 2023.

- 2022: to publish in Quarter 4 2024.

Human capital

- 2017 to 2020: already available.

- 2021: to publish in Quarter 1 2023.

- 2022: to publish in Quarter 3 2023.

Uncapitalised intangibles

- 2017 and 2018: already available.

- 2019: to publish in Quarter 2 (Apr to June) 2022.

- 2020: to publish in Quarter 1 2023.

- 2021: to publish in Quarter 1 2024.

- 2022: to publish in Quarter 1 2025.

Annual gross inclusive income (GII) and net inclusive income (NII) publication

- 2017 to 2020: to publish in Quarter 1 2023.

- 2021 and 2022: to publish in Quarter 1 2025.

5 . Future research and reviews

Alongside the annual series, we propose to undertake research work through 2022 to investigate the potential to nowcast omitted variables. This will use leading or faster indicators to deliver faster indicative estimates on either a six-monthly or quarterly basis, dependent on the viability of these methods. Depending on the success of research into methods, we aim to deliver 2021 nowcast estimates in Quarter 1 (Jan to Mar) 2023 alongside the publication of 2017 to 2020 annual estimates, with quarterly updates to follow, potentially shortening the lag to publication dependent on the method's capacity and need for data.

While this package is currently under consideration in market prices (that is delivered in prices equivalent or broadly equivalent to those used in gross domestic product (GDP)) the Dasgupta Review made a strong case for the use of "accounting prices". These reflect the impact certain economic decisions have on other produced, human, or natural capital, where those impacts are not priced in to market prices. An example of this might be (in the absence of taxes or other market interventions to account for it) the cost of hospital care not being priced into the market price of cigarettes. As such, we will also undertake research to explore how to develop a suite of accounting prices and how these could be used in this framework.

Finally, in addition to the work on measures of inclusive income, the Office for National Statistic's (ONS's) indicator-based approaches also add value to how we measure social progress in the UK. Alongside the products outlined in this workplan, we also plan to update the Measuring National Well-being dashboard alongside our August release of gross domestic product (GDP). This dashboard provides an overview of the quality of life of those in the UK through the lenses of personal well-being, health, the environment, the economy, personal finance and governance, among others, to provide a rounded view of people's lives. We will also review the indicators used within the dashboard, engaging with expert users and the public to ensure it provides appropriate metrics as we recover from the coronavirus (COVID-19) pandemic.