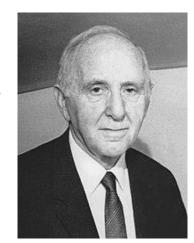




Richard Heys
Deputy Chief Economist | ONS

### Why the need to go "Beyond GDP"?

Simon Kuznets, United States Office of Business Economics, **1932** "The welfare of a nation can, therefore, scarcely be inferred from a measurement of national income as defined above."





Robert Kennedy, 1968:

"It measures neither our wit nor our courage, neither our wisdom nor our learning, neither our compassion nor our devotion to our country, it measures everything in short, except that which makes life worthwhile."

Audience member, 2016, panel discussion during EU referendum "That's your bloody GDP, not ours"

"What we measure affects what we do. If we have the wrong metrics, we will strive for the wrong things." (Stiglitz, Fitoussi & Sen 2010)

## Why do we need a new approach to Beyond GDP?

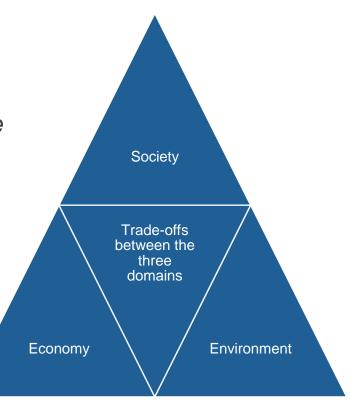
- **Different users have different needs** the current SNA process demonstrates how difficult it is to try and reach a compromise between those who wish a pure economic GDP for use in economic policy and those who seek a wider perspective.
- UN SG's 'Our Common Agenda' recognises the need for a wider-ranging set of complements to GDP and the traditional economic measurements, including reaching out beyond the economic statistics domains.
- The answer for all questions should not and cannot always be changing the core SNA accounts. We need to build on SNA, SEEA and other manuals.

## Question of scope

"Beyond GDP" is not just an economic question – it explicitly requires us to break down barriers between data and statistics to better understand trade-offs through integrating across different domains.

"The interesting thing about the sprints is realising that I am part of what you call the 'Beyond GDP' community. I just didn't see the connection before."

Terminology matters: inter-changeable 'technical' terms like 'well-being' 'welfare', 'Beyond GDP', 'inclusion' and 'cohesion' can mean very different things to different audiences.



## **Question of complexity**

**Users find the current landscape overly complex** – both in terms of metrics, but also types of metrics:

- Composite indices OECD WISE, ONS
- Distributional accounts and Disaggregation accounts NTA, NTTA, DINA, Democratic weighted models
- Capabilities Models Human Development Index
- Multi-dimensional frameworks SDGs, vulnerability indices, wellbeing indices,
- Wealth-based measures Comprehensive and Inclusive Wealth
- Satellite Accounts and Time-Use methods

#### Key requirements:

- Map existing landscape
- Identify (and fill) gaps
- Identify methods to signpost users to the best metric for their needs

## Question of aligning methods

Domain 1: Demographic & Social Domain 3: Environment & Multi-Domain 2: Economic Statistics **Statistics Domain Statistics** 2.9 Science 3.3 Multi-1.5 Income & 2.2 Economic 2.3 Business 1.9 Culture technology & 3.1 Environment Domain Consumption Accounts **Statistics** innovation **Statistics** Integrated Acquisition & Household Information Theatres. **Environment Economic** Disposal of **Human Capital** Satellite Account Cinemas Society Capital Accounts Museums & Flow of Funds & Entrepreneurship Libraries **Capital Services Books** 'Uncapitalised' Intangible Household **Natural Capital Human Capital Cultural Capital** Financial and Non-Financial Capital Capital **Durables** 

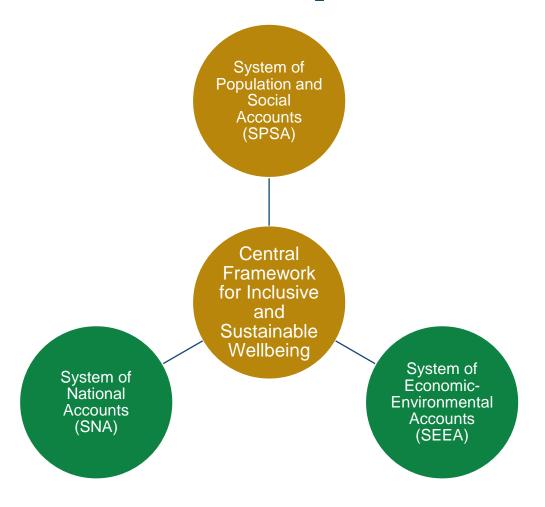
## **Proposed Way forward**

The requirement is for an integrated statistical system which gives clarity around how the range of statistical standards and outputs can be utilised to give a more comprehensive picture of the modern world, and deliver a coherent framework within which users can utilise different data in varied ways to meet complex policy questions.

The objective is to develop a framework to integrate across the economic, environmental and social spheres:

- Highlighting consistent methods and outputs to aide bringing together a clearer picture of wellbeing in a cross-disciplinary way.
- Extending existing methods where feasible
- Mapping and filling gaps between existing Standards / Manuals
- Recycling materials wherever this is efficient.

## **Core Proposal**



- The development of a System of Population and Social Accounts (SPSA), delivering data which can be integrated with the SNA and SEEA, that brings together the various extended SNA accounts and other existing socio-demographic accounts available today and promotes their potential use
- The development of a Central Framework for Inclusive and Sustainable Wellbeing that includes:
  - a comprehensive dashboard, linked to the SDGs, of core wellbeing indicators and potentially new composite indices,
  - distributional breakdowns of aggregated and disaggregated accounting and wellbeing indicators,
  - measures of flows and stocks, building on measures obtained from comprehensive and inclusive wealth accounting, considering a wider landscape of capitals than those covered by the SNA, with a focus on consistency of measurement for the derivation of 'objective' composite indices to provide a fuller landscape of the trade-offs involved in achieving economic welfare and people's wellbeing (now and later).

# System of Population and Social Accounts (SPSA)

#### Key issues:

- Ownership FOC Group for Social Statistics and international organisations
- Coverage / key topics to focus on previous scopes were identified during 1960s /
  1970s many of which are now addressed in SNA satellite accounts and other similar
  accounting models (WHO Health Accounts), but need to map against UN 'mega-trends'
   aging, climate change, urbanisation, digitalisation, globalisation.
- Staging of work
  - Identifying / mapping sources / existing guidance materials
  - Developing chapter headings / skeletons of content aiming to keep these thin and signpost rich existing material.
  - Identifying owners for drafting of text can address on a chapter-by-chapter basis

     don't need all materials simultaneously.

# Central Framework for Inclusive and Sustainable Wellbeing

(Very Draft) Proposed Chapter Structure:

- 1. **Definition of Wellbeing** key components (inclusion, sustainability, cohesion etc)
- 2. Descriptions of existing metrics and measures: One pager per product capturing:
  - Key methods
  - Key assumptions
  - Geographic coverage,
  - Time period covered
  - Contact details
- 3. Categorisation and mapping of existing metrics / measures and products
  - Aggregated / composite measures
  - Dashboard approaches
  - Distributional / disaggregated measures
- 4. **Domestic Dashboards** common aspects and tailoring
- 5. Areas for further development

# What's so wrong with GDP?

## **Capital Matters Too**



London, 1948: Birthplace of the SNA

UK, 2020, £million, nominal prices	2020 nominal values (£million)	of which National Accounts	of which Natural Capital Accounts	of which Human Capital Accounts
Produced capital				
stock	£4,866,083	£4,866,083	£-	£-
Non-produced 'ecosystem'				
assets	£1,464,614	£-	£1,464,614	£-
Non-produced				
'other				
environmental'				
assets	£6,606,659	£6,334,792	£271,867	£-
Non-produced				
'other' assets	£23,763,667	£3,667	£-	£23,760,000
Inclusive non-				
financial assets	£36,701,023	£11,204,542	£1,736,481	£23,760,000
Financial assets	£35,848,372	£35,848,372	£-	£-
Inclusive assets	£72,549,395	£47,052,914	£1,736,481	£23,760,000
Financial				
liabilities	£36,333,160	£36,333,160	£-	£-
Environmental				
liabilities	£-	£-	£-	£-
Inclusive net				
worth	£36,216,235	£10,719,754	£1,736,481	£23,760,000

Source: Office for National Statistics

What's GDP doing 'right' & 'wrong'?

Definitive

Timely

**Explainable** 

Internally consistent methods and scope

"All economic variables of price and volume are measures of economic welfare to some degree: GDP is a measure of welfare, but it is also importantly true that it is not a very accurate one because it is not a complete one."

Excludes key components beyond the economy

Gross, not net – depreciation of assets excluded

Increasingly challenged by complicated **ownership** (e.g. atmosphere, data)

SNA08 increasingly dated, so arguably not an up-to-date measure of the market economy

# Why do we need a new approach to Beyond GDP?

- **Different users have different needs** the current SNA process demonstrates how difficult it is to try and reach a compromise between those who wish a pure economic GDP for use in economic policy and those who seek a wider perspective.
- Every Agency has its own metrics little agreement on focus, scope or methods
- UN SG's 'Our Common Agenda' recognises the need for a wider-ranging set of complements to GDP and the traditional economic measurements, including reaching out beyond the economic statistics domains.
- The answer for all questions should not and cannot always be changing the core SNA accounts. We need to build on SNA, SEEA and other manuals.

## Methods and strategy

#### **Leveraging Strengths of GDP / National Accounts**

1) Methods of aggregation across priced and 'free goods'.









2) Methods to integrate stocks and flows – the symmetry between the <u>activity</u> and <u>asset</u> boundaries

#### **Proposed Strategy**

- 1. Use National Accounts method whilst widening the asset and activity boundaries, expanding the range of benefits to citizens.
- 2. Use pre-existing data sources, relying on existing international manuals and standards which are designed to be consistent, to minimise cost and permit potential replicability.
- 3. Make allowances for changes we can foresee from international negotiations around standards (SNA/ BPM) to future-proof outputs.
- 4. Method is akin to inclusive wealth (Dasgupta) and can be considered the equivalent flow measures to match inclusive wealth stocks.



National Accounts – economic activity within the production boundary



National Accounts – economic activity within the production boundary



Household Satellite Accounts – economic activity within the household without participating in economic markets

Based around economic ownership



National Accounts – economic activity within the production boundary

Household Satellite Accounts – economic activity within the household without participating in economic markets

Human activity to deliver flows of benefits

Based around economic ownership

More difficult ownership considerations



Human activity to deliver flows of benefits

Based around economic ownership

More difficult ownership considerations

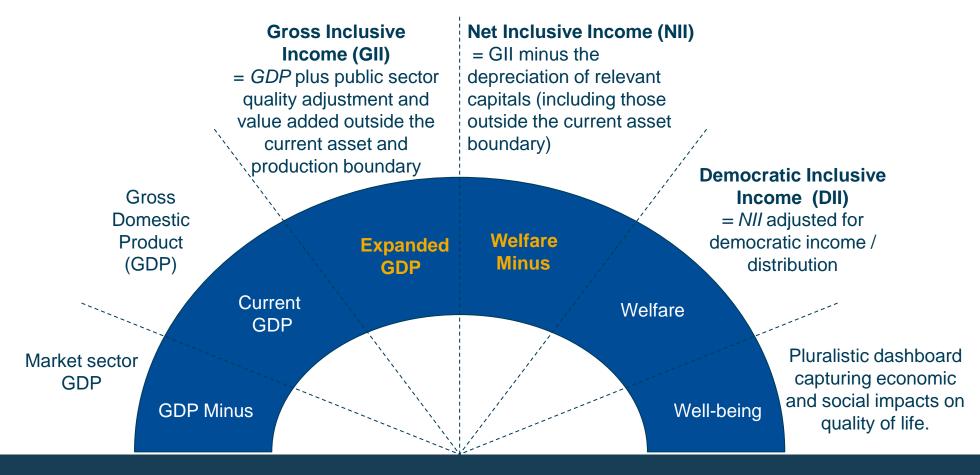


Human activity to deliver flows of benefits

Includes flows of benefits which don't result from human intervention

## Delivering new Composite Measures

## **Beyond GDP: Complementary inclusive income measures**

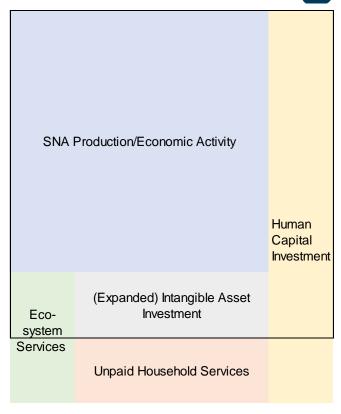


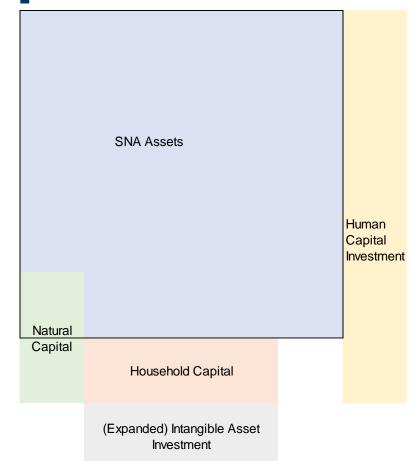
## **Building upon National Accounts**

SNA Production/Economic Activity

SNA Assets

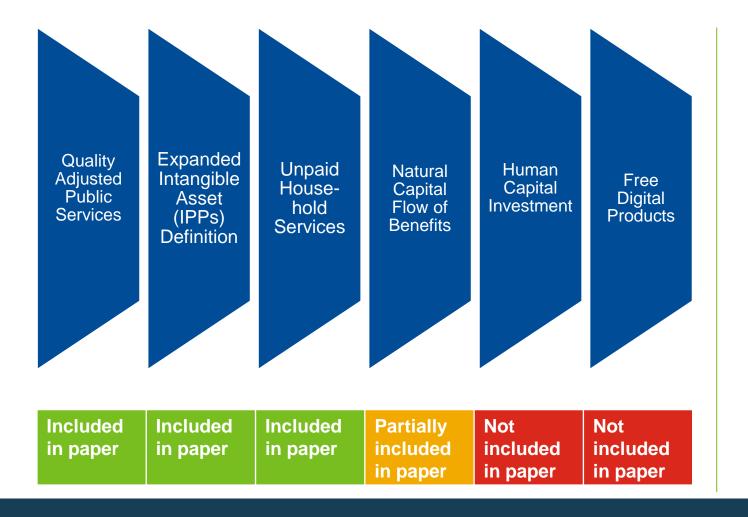
### **Building upon National Accounts**





- Expansion of the asset and production boundaries to include investment in an expanded array of **natural capitals**, as well as the ecosystem services derived from these capitals
- Expansion of the asset boundary to include investment in **human capital**
- Expansion of the asset boundary to include investment in an expanded array of "intangible capitals"
- Expansion of the production boundary to include services produced by the household for own-use and expansion of the asset boundary to include the household durables used as capital when producing these unpaid household services

## The State of Development



#### GDP → GII → NII

**GDP** 

As published by ONS in Blue Book 2020

#### Gross Inclusive Income

GDP (minus non-market GVA in industries O, P, and Q)

Plus: Quality adjusted non-market GVA in industries O, P, and Q

Plus: Household flow of benefits

*Plus:* The flow of benefits from carbon sequestration performed by a subset of environmental assets in the UK.

Plus: Investment in previously uncapitalised Intellectual Property Products (i.e. intangible capital)

#### Net Inclusive Income (NII)

Gross Inclusive Income (GII)

Plus: Income from abroad

= Gross National Inclusive Income

Less: Transfers from Abroad

= Gross National Disposable Inclusive Income

Less: Depreciation of

- Tangible and intangible productive assets
- Durables in the Household sector
- Uncapitalised intangibles

Less: Degradation of Atmosphere due to Carbon Emissions

## Results

#### **Public Sector Quality Adjustment**



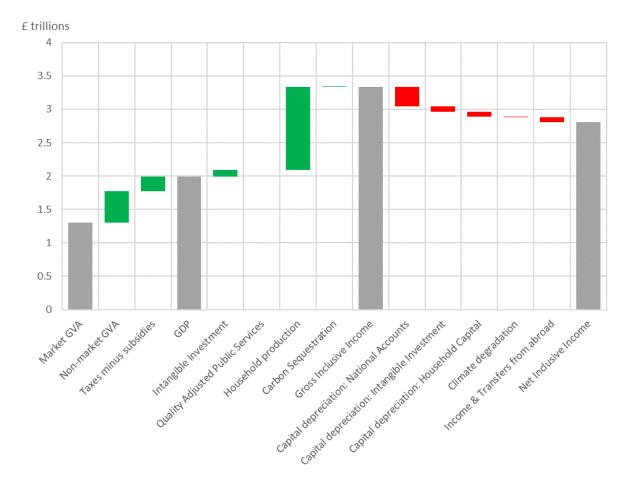
The effect of quality adjustment (e.g qualifications achieved, not just the number of children in school) on Government, Health, and Education (O, P, and Q) would be a symmetric volume increase in all three measures of CVM GDP, although minimal change in growth rates in any particular year.

#### NII – relative component scales

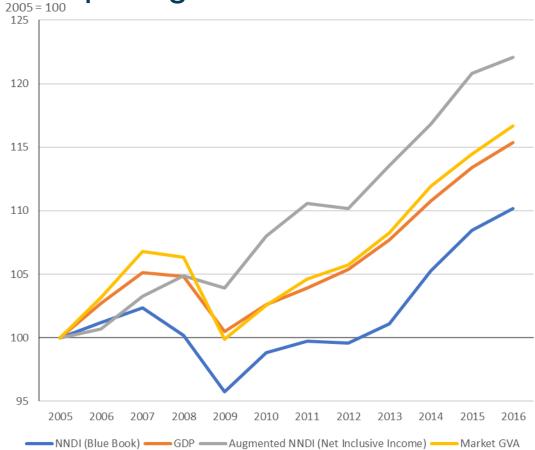
Market GVA and unpaid household work of broadly similar scales and the two largest parts of GII.

Growth in carbon sequestration more than offset by increased climate degradation (the marginal costs of a unit of carbon growing faster than the decrease in the volume of carbon released).

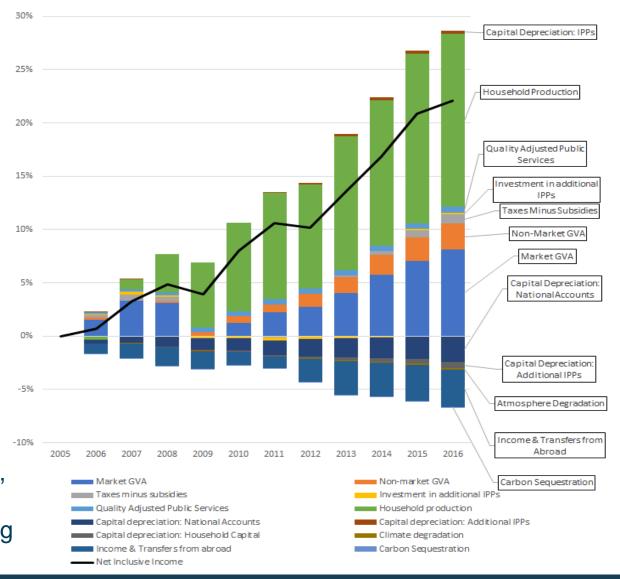
Depreciation and depletion broadly offset the value of non-market GVA.



#### Comparing NII to GDP & NNDI



NII has a similar growth path to NNDI and GDP post 2009, but a far more moderate financial crisis, driven by unpaid work. Post-2009, unpaid work continues to grow, outpacing paid work in the market economy.



## Conclusions

#### Conclusions

#### Is this new measure perfect?

- No, further work required
  - A Human capital satellite account framework fully incorporating stocks and flows
  - Impacts of free digital services on household production
  - Fuller set of natural capital service flows

#### Will these new measures replace GDP?

- No, there is still a place for GDP in economic decision-making.
- NII is a complement, providing a fuller richer picture of economic welfare
- <u>Inclusive Income develops measures of economic welfare that build upon, rather than rebuilds, national accounts</u>

#### What happens next?

- Workplan 12<sup>th</sup> May 2022 set out a plan to published annual updates covering 2017-2020 in Q1 2023, followed by 2021-2022 in Q1 2025
- Research into nowcasting to generate quarterly series