

# Flow Measures on a consistent basis to Inclusive Wealth

**Richard Heys**  
Deputy Chief Economist | ONS

---

**The views expressed are those of the authors and not necessarily of the ONS.**

# What's so wrong with GDP?

# Methods and constraints

## Strengths

**Methods of aggregation** across priced and 'free goods'.



Methods to **integrate stocks and flows** – the symmetry between the activity and asset boundaries

## Weaknesses

### Constrained boundary

*“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.”*

- Doesn't capture flows of benefit outside the market
- Doesn't capture depreciation of assets
- As a domestic measure, doesn't grapple with the international aspect of natural assets
- Doesn't recognise the impact of beyond the productive sector

# Widening the Asset Boundary – viewed from a flows perspective

# Why focus on flows?

- 1) Stocks of capital can be hard to measure (at least consistently) – see Sprint Session 1 in this series.
- 2) A net measure of flows, including depreciation and depletion can give you a line of sight on changes in stocks which can serve as a functional substitute for stocks measures
- 3) Methods have been agreed and manuals published to support estimation of many of the flow components required. Some countries have access to data series which can be used now.

# Where can we source data from?



**National Accounts** – economic activity within the production boundary



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



**Environmental Satellite Accounts** – economic value of the natural world, including natural capitals

Human activity to deliver flows of benefits and losses

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

# 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)

*Plus:* Flows of services from other natural capital assets

*Plus:* Flows of services from human capital not otherwise accounted for

## **Net Inclusive Income**

Gross Inclusive Income (GII)

*Plus:* Income from abroad

= Gross National Income

*Less:* Transfers from Abroad

= Gross National Disposable Income

*Less:* Depreciation of

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

*Less:* Degradation of Atmosphere due to Carbon Emissions

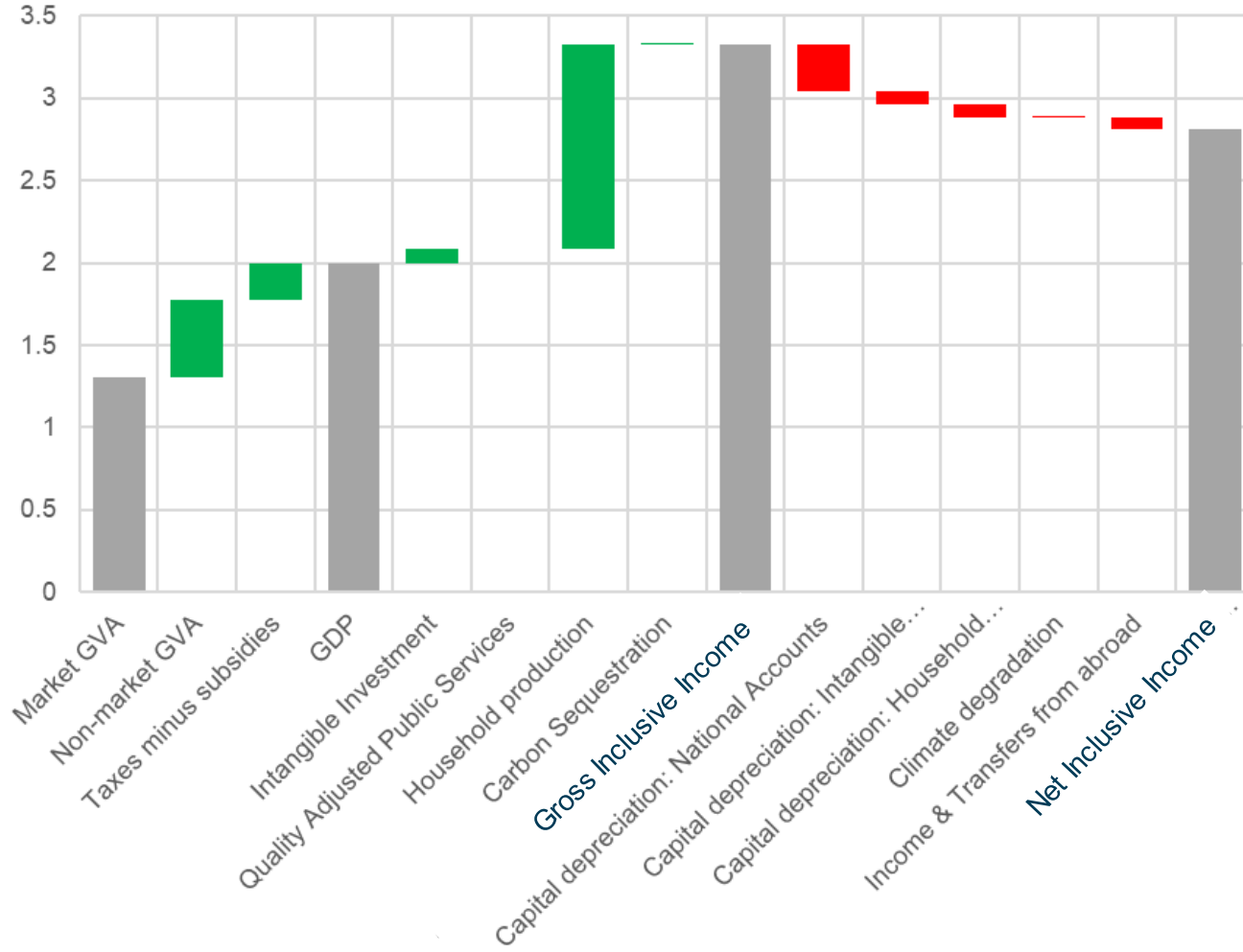
*Less:* Degradation and depletion of other Natural and Human Capital assets

# UK Results



# The relative magnitudes of components

£ trillions



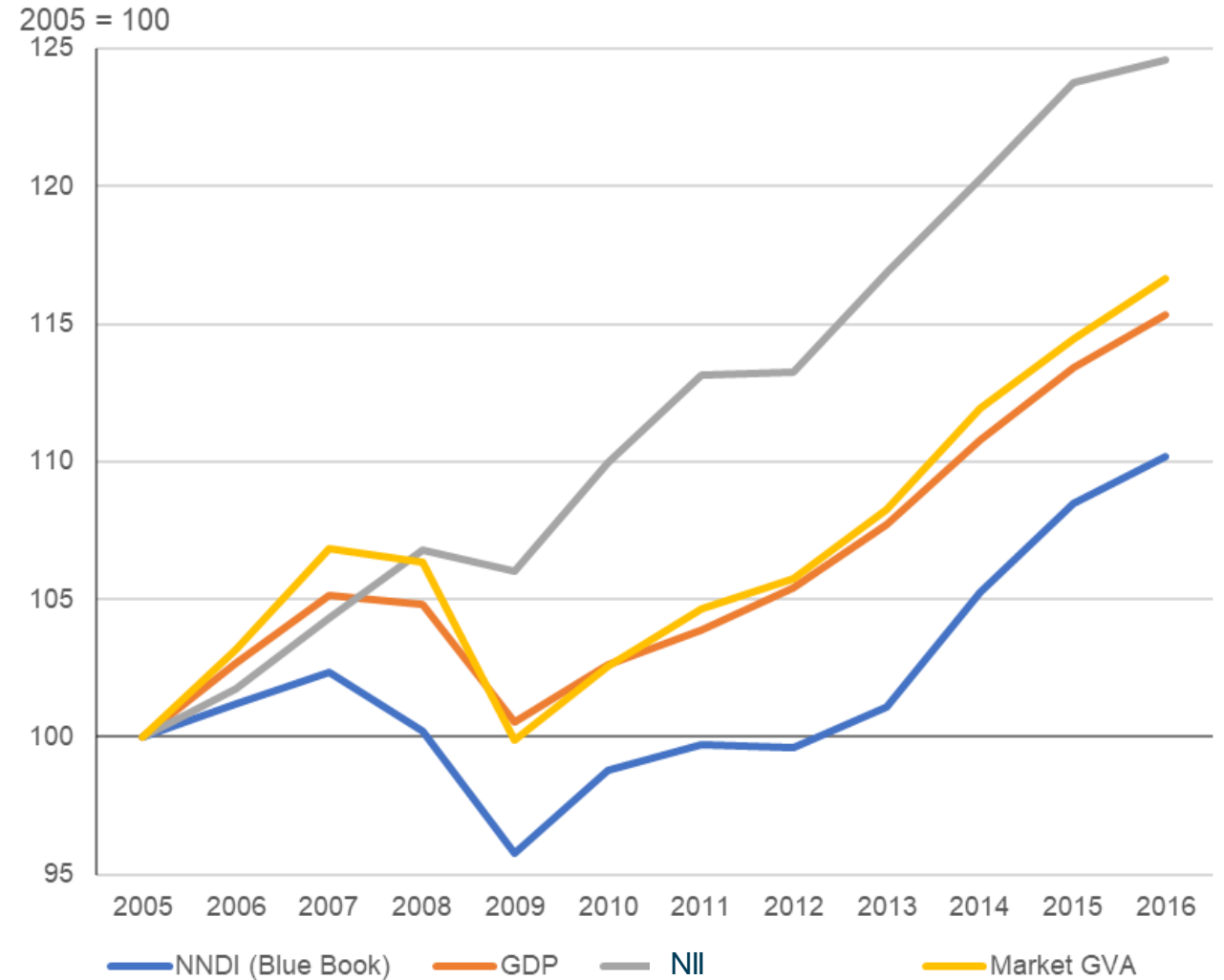
**Progression from Market GVA to Net Inclusive Income (NII)**

*UK, £billions, Current Prices, 2016*

# A comparison of growth paths

**A comparison of standard GDP and Net National Disposable Income, as published by the ONS in Blue Book 2020, with NII**

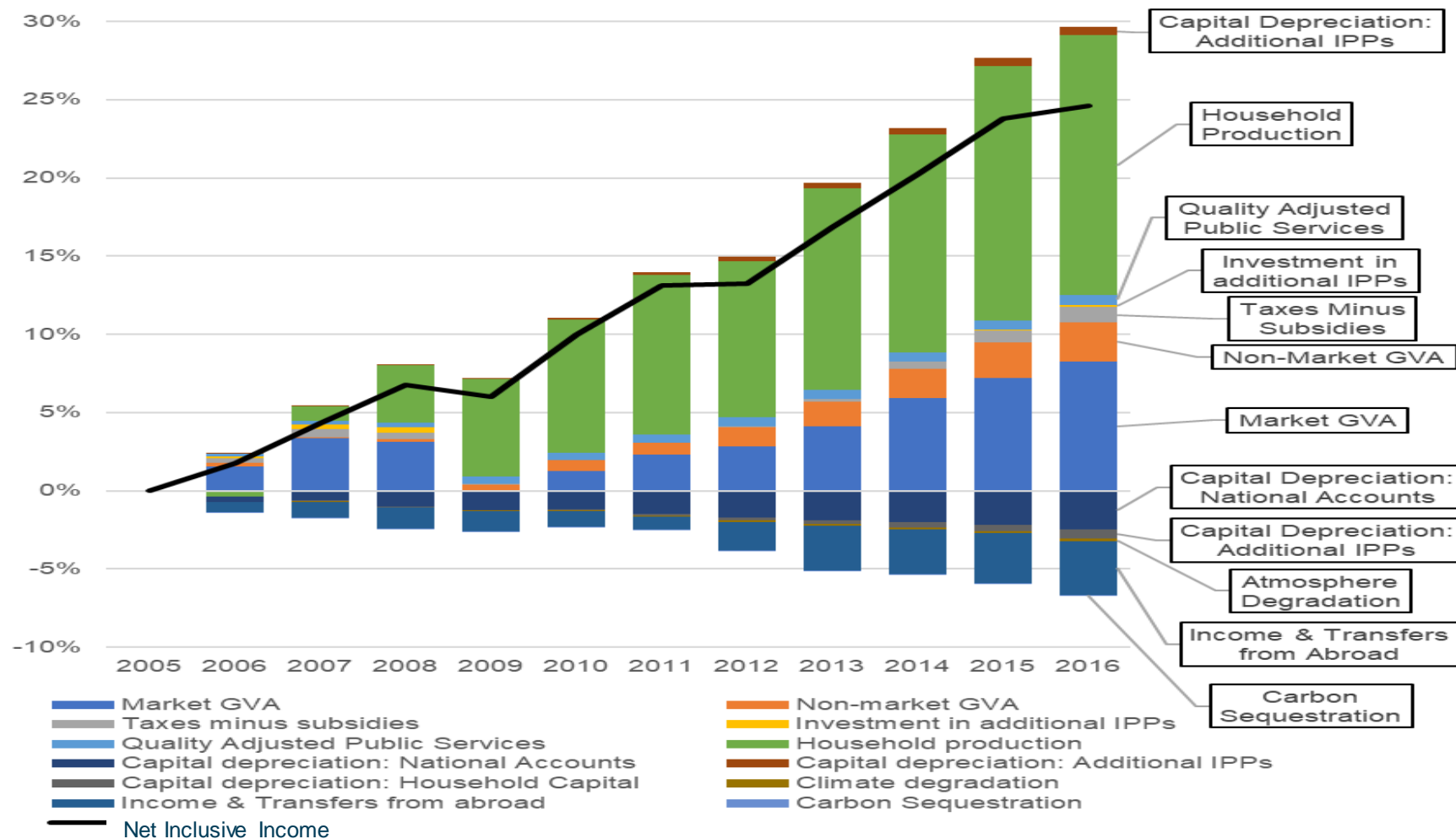
*UK, 2005 = 100, Chained Volume Measures*



# Growth 2005-2016

## Contributions to growth in CVM NII since 2005

UK, % and percentage points



# Conclusions

# Conclusions

## Are these new measure perfect?

- No, further work required, but using existing agreed methods and data is low-cost entry-point
  - 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.
- GII and NII are complements for GDP and other measures, providing a fuller richer picture of economic welfare
- This work develops measures of economic welfare that build upon, rather than rebuilds, national accounts

## What happens next?

- ONS will publish a workplan on May 12<sup>th</sup> outlining how it proposes to bring GII and NII into routine production to complement GDP.