Towards the 2025 SNA and BPM7

Issues Note: Action Point A.8

# Consistency in the Application of the Sum-of-Costs Approach

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# Introduction

## The sum-of-costs approach is used in the SNA to value

- Output of for own final use (in the absence of reliable market-equivalent prices)
- Non-market output provided free of charge, or at prices that are not economically significant, to other institutional units or the community as a whole

## The Issues Note considers 3 issues related to the sum-of-costs approach

- consistency in the application of the approach – whether a return to capital on assets used in production should be included. In the 2008 SNA there are different approaches, depending on whether the producer is market or non-market
- the scope of assets for which a return on capital should be applied if a return on capital is included in the sum-of-costs approach
- the scope of costs to be included – in particular whether rent costs should be included

# 2008 SNA guidance

Valuation of output for own final use

6.125 When reliable market prices cannot be obtained, a second best procedure must be used in which the value of the output of the goods or services produced for own final use is deemed to be equal to the sum of their costs of production: that is, as the sum of:

a. Intermediate consumption;
b. Compensation of employees
c. Consumption of fixed capital;
d. A net return to fixed capital;
e. Other taxes (less subsidies) on production.

By convention, no net return to capital is included when own-account production is undertaken by non-market producers.

Non-market output

6.130 The value of the non-market output provided without charge to households is estimated as the sum of costs of production, as follows:

a. Intermediate consumption;
b. Compensation of employees;
c. Consumption of fixed capital;
d. Other taxes (less subsidies) on production.

# Issue 1: Consistency in the application of the sum-of-costs approach

- In the 2008 SNA a change was made to include a net return to fixed capital in the valuation of output for own final use by market producers as part of the sum-of-costs when this approach is used for estimating the value of output
- However, this change was not made to the valuation of output produced by non-market producers (i.e., by government and NPISHs) for both output produced for their own final use and that provided free of charge, or at prices that are not economically significant, to other institutions and to the community as a whole
- At the time of the update of the SNA, the AEG recommended including a return to fixed capital for non-market producers
- While many countries agreed with the recommendation, some countries argued that the issue of a return to capital for non-market producers raised conceptual and implementation difficulties. The ISWGNA noted the lack of consensus and recommended that the SNA continue with the 1993 SNA's recommendations regarding the estimation of non-market output
- This has led to an inconsistency in the 2008 SNA in the valuation of output using the sum-of-costs approach between market and non-market producers
- **Should this inconsistency be continued in the 2025 SNA, or should it be resolved?**

# Issue 1: Consistency in the application of the sum-of-costs approach

- Cost structures faced by non-market producers are no different to those faced by market producers
  - Both require capital to undertake production and both face a cost for this capital
  - To not include a cost of capital for non-market producers would lead to a change in the value of output if an activity is outsourced to a market producer
- The appropriate rate of return is considered to be the expected real rate on government bonds supplemented if necessary by other indicators of the cost of borrowing
  - This is in line with capital theory and is readily available
- In 2006, comprehensive balance sheets were a relatively new feature
  - They were introduced in the 1993 SNA and the 2001 GFS Manual
  - Balance sheets are now a well-established aspect of national accounting
  - That said, they are not available for all countries. With greater emphasis on net measures – see GN CM.4 – there will need to be improvements to CoFC estimates which in turn will require improved balance sheets
    - This will be a focus of SNA 2025 implementation
    - Besides, it is also difficult to adequately measure CoFC, which is a non-contentious component of the sum-of-costs approach, in the absence of balance sheets.

# Issue 1: Consistency in the application of the sum-of-costs approach

- Also in 2006, the notion of capital services (of which the cost of capital is a component) was novel
  - The concept was first introduced in the OECD's 2001 Measuring Capital Manual
  - The Manuel was updated in 2009 to be consistent with the 2008 SNA
  - The Manual provides conceptual and methodological guidance on compiling estimates of capital services in a way that achieves consistency with balance sheet measures and measures of consumption of fixed capital
- It is considered that sufficient, well-tested, conceptual and methodological guidance is now available to include a return to capital when the sum-of-costs approach is used to measure the value of output for non-market producers

# Issue 2: The scope of capital services to be included in the sum-of-costs approach

- Fixed assets used mainly by non-market producers
  - Infrastructure assets (eg roads) – include; significant capital is used in the production of government services
  - Historical monuments and city parks – exclude due to data availability issues; this is unlikely to impact on the computability of estimates for market and non-market producers
- Inventories
  - Other than work-in-progress
    - Include conceptually but in practice include only where material
  - Work in progress
    - Include (fix up 2008 SNA conflicting advice)
- Valuables
  - Exclude for practical reasons regarding valuations
- Non-produced non-financial assets
  - Undeveloped land – exclude for practical reasons regarding valuation
  - Other non-produced non-financial assets – include (Both return to capital and depletion of natural resources)

# Issue 3: The scope of costs to be included in the sum-of costs approach

- Guidance Note AI.2 recommends that rent be included (it is currently excluded)
    - *“it is clear that these [i.e., rent costs] are actually an input to production, so it would make sense to include them in the costs. It is expected that the costs of leasing any non-produced non-financial assets (or any opportunity costs related to the use of these assets) will be reflected in market prices of similar goods and services.”*

# Summary of recommendations

1. A return to capital be included in the sum-of-costs approach for non-market producers, which would achieve consistency with the approach for market producers
   - due to significant issues regarding data availability, it is proposed that by convention city parks and historical monuments, and undeveloped land, be excluded from the scope of assets to which a return to capital should be applied
2. The scope of assets for which a return to capital should be recognized is expanded to include work-in-progress, other inventories (where significant), non-produced non-financial assets, along with fixed assets
   - Although valuables which are used in the production of goods and services should be conceptually included, it is recommended that they remain excluded on pragmatic grounds
3. Depletion of natural resources be added as a cost (where relevant) in the sum-of-costs approach
4. Rent be included in the sum-of-costs approach

# Impacts

- ‘Rough’ calculations for Australia suggest that this could add up to 1.3% to levels of GDP
- There would be negligible impact on estimates of movement in GDP
- If the recommendations are accepted, further work on estimating the impact on GDP for including a return to capital for non-market producers where the sum-of-costs approach will be used will be undertaken as part of the preparation of the implementation of SNA 2025


Thank you for your interest!