STATISTICS

GFSM 2014 update

Proposed Recommendations Document:

1.27 Consistency in the application of the sum of costs approach

Summary Details

Links to Related Guidance/Discussion/Issue Notes and Latest Manuals: Issue Note: Action point A.8 Consistency in the Application of the Sum of Costs Approach SNA/M3.24/05: Cost of capital for nonmarket producers Draft *2025 SNA* and Draft *BPM7* [1]	
Global Consultation(s):	SNA: June 2023
Discussions at the Advisory Expert Group on National Accounts (AEG) / Balance of Payments Committee (BOPCOM) Meeting(s):	AEG: October 2024; July 2024; July 2023
Discussions at GFSAC Meeting(s):	To be determined
Summary of Proposed Recommendations: The proposed recommendations are to update the *GFSM 2014* to align with the *2025 SNA* in relation to the sum of costs approach. In particular, including the net return to capital in the valuation of government own-account production of fixed assets with clarifications on the net return to capital's scope and methodology. Additionally, the definition of production costs for the market test should include rent payable on non-produced assets as well as depletion, where relevant. Finally, it is proposed that further research is needed to explore the implications of these changes in the context of the market test, which should also be considered as part of GFSM Update research project 2.1 *Boundary between government-controlled nonmarket producers engaged in nonfinancial activities and public nonfinancial corporations.*	

Background and Issues

1. In macroeconomic statistics, the sum of costs approach assumes that market prices, or exchange values, can be approximated by summing up the costs of production. The approach is used to value nonmarket output of general government, nonprofit institutions serving households, and the central bank. The approach is also used to value own-account production of fixed assets and own-account production

[1] Links are to the "white cover" versions of the *2025 SNA* and *BPM7*. While technically still considered draft only editorial amendments will be made between these versions and the final versions.

intended for final use by market producers. While government output is not the primary focus of the *GFSM 2014*, the sum of costs approach remains relevant for valuing government's own-account production of fixed assets, and indirectly, the market test used to delineate between general government entities and public corporations.

2. In the *2008 SNA*, the sum of costs approach for valuing output for own final use varies between market and nonmarket producers. For market producers, a net return to fixed capital is included, however, no net return to capital is included for nonmarket producers. The draft *2025 SNA* aims for a more consistent approach by incorporating the net return to the capital used in production for nonmarket producers. Due to significant data availability challenges, city parks, historical monuments, and undeveloped land will be excluded from the scope of assets eligible for the application of a return on capital.

3. Additionally, the draft *2025 SNA* expands the range of assets for which a net return on capital is to be included, incorporating work-in-progress, other inventories (where significant), non-produced nonfinancial assets, along with fixed assets. The sum of costs should also explicitly include rent payable for the use of non-produced assets and depletion of natural resources used in production.

4. The draft *2025 SNA* recommends adopting a rate of return based on opportunity cost, such as the interest rate incurred for borrowing of funds. During the October 2024 meeting of the AEG (SNA/M3.24/05 - Cost of capital for non-market producers), the estimation of the net return to capital for nonmarket producers was discussed. The paper proposed the following:

a. The net return to capital should be calculated as the rate of return multiplied by the value of nonfinancial assets used in production of nonmarket output.

b. To ensure comparability across countries, a real rate of return of 2 per cent should be adopted by all countries. The nominal rate can be calculated as the real rate of return plus the country's target inflation rate. For those countries that do not use inflation targeting, a nominal rate of 5 per cent is recommended. However, countries can choose a different rate if justified by compelling circumstances.

c. Countries lacking nonfinancial balance sheet data face an obstacle in estimating the net return to capital. In such cases, an estimate can be derived by examining the relationship between the net return to capital and depreciation (consumption of fixed capital).[2]

5. Within the national accounts framework, the changes to the sum of costs approach lead to an increase in government output and, consequently, GDP. Furthermore, the definition of costs used to establish whether a unit is a market producer has been revised to incorporate these changes. For the updated GFSM, the impacts would be reflected in the valuation of own-account production of fixed assets and the market test.

6. The *GFSM 2014* definition of production costs already includes the net return to capital when determining the sector classification of a public sector unit. However, including depletion and rent on nonproduced assets may increase the likelihood of a public sector unit being classified as nonmarket.

[2] This will continue to be developed through the SNA update process.

This is especially relevant when considering the guidance in *GFSM 2014* (para. 2.69), which states that sales should cover at least half of production costs.

Proposed Recommendations

7. It is recommended that the *GFSM 2014* be updated to align with the recommendations of the AEG and the draft *2025 SNA* on the definition and scope of the sum-of-costs approach. In doing so, the following should be considered:

a. The valuation of government own-account production of fixed assets (research and development, computer software and databases, entertainment, literary and artistic originals) should no longer exclude a net return to capital. This will also apply to the valuation of government data assets, as discussed in GFSM Update research project 1.11 (*Identifying, valuing and reporting government data assets*). Language around the net return to capital should be clarified to make clearer the scope of assets and discuss methodology for estimation.

b. The method for determining the net return to capital for nonmarket production is to multiply a rate of return to capital by the value of nonfinancial assets used in nonmarket production.

c. Where balance sheet data are compiled for general government or the wider public sector, countries should adopt a real rate of return of 2 per cent and a nominal rate of equal to the real rate plus a country's inflation target. In the absence of inflation targeting, a 5 per cent nominal rate should be used, unless there are compelling reasons to choose a different rate.[3] Countries that do not compile balance sheet data should follow the alternative methodology based on the relationship between the net return to capital and depreciation. For central bank nonmarket output the same rate of return as for general government should be used.

d. The definition of production costs, for the market test, should be revised to include rent payable for the use of nonproduced assets and depletion of natural resources used in production.

e. GFSM Update research project 2.1 (*Boundary between government-controlled nonmarket producers engaged in nonfinancial activities and public nonfinancial corporations)* should further explore the implications of including depletion and rent payable on nonproduced assets in context of the market test.

Rationale for Proposed Recommendations

8. The proposed recommendations aim to harmonize the updated GFSM with the *2025 SNA*, a key objective of the *GFSM 2014* update process. Additionally, the proposed recommendations consider issues unique to the government sector, particularly impacting on the sector classification of public sector units. Since the *GFSM 2014* (paras. 2.73-2.74), already includes the net return to capital in the definition of production costs when determining whether a producer is a market producer only clarifications are

[3] A country can use a different rate if justified by compelling circumstances, for example, countries where government borrowing costs or inflation are significantly different to these rates.

recommended. The additional revisions to the definition of production costs may lead to more units being classified to the general government sector. Therefore, the implications of these changes should be further examined in the context of the market test.

Proposed Text for GFSM Update

9. At minimum, *GFSM 2014* (paras. 2.74, 7.67 and 7.72), should be updated to reflect the changes to the sum of costs approach as defined in draft *2025 SNA* paras. (4A.6-4A.13).