

Remote Meeting
July 10–13, 2023

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A.8 Sum of Costs Approach Consenters

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As of 10 July 2023, a total of 64 respondents contributed to this consultation, 49 of which consented to the publishing of their verbatim responses which are provided below. However, the graphs/tables below reflect the answers of all 64 respondents.

Completely anonymous contributions are excluded.

Q1A. Do you agree with the recommendation to include a return to capital in the sum of costs approach for non-market producers?

Q1A	Frequency
Yes	41
No	12
I don't know/Unsure	11
No response	
Total	64

Albania (Statistical Institute - INSTAT): Yes

Angola (National Statistic Office): Yes

Armenia (Central Bank of Armenia): Yes

Aruba (CBS): I don't know/Unsure

Australia (Australian Bureau of Statistics): Yes

Azerbaijan (The State Statistical Committee of the Republic of Azerbaijan): No

Belgium (National Bank of Belgium): Yes

Canada (Statistics Canada): No

Chile (Central Bank of Chile): Yes

Cyprus (Statistical Service of Cyprus): Yes

Denmark (Statistics Denmark): Yes

Egypt, Arab Republic (The Central Agency for Public Mobilization & Statistics): Yes

Finland (Statistics Finland): Yes

France (NSI): Yes

Georgia (National Statistics Office of Georgia): I don't know/Unsure

Germany (Destatis (Federal Statistical Office)): No

Iraq (Central statistical organization): I don't know/Unsure

Ireland (Central Statistics Office): Yes

Israel (Central Bureau of Statistics): I don't know/Unsure

Italy (Istat): I don't know/Unsure

Lithuania (State Data Agency. Statistics Lithuania): I don't know/Unsure

Malaysia (Department of Statistics Malaysia): Yes

Malta (National Statistics Office): No

Mauritius (Statistics Mauritius): No

México (National Institute of Statistics and Geography (INEGI)): Yes

Nederland (Statistics Netherlands (CBS) and De Nederlandsche Bank (DNB)): I don't know/Unsure

New Zealand (Statistics New Zealand): No

Nicaragua (Banco Central de Nicaragua): Yes

Niger (Institut national de la statistique): Yes

Norway (Statistics Norway): No

Polska (Statistics Poland): No

Portugal (Statistics Portugal): No

Republic of Armenia (Statistical Committee): Yes

Singapore (Singapore Department of Statistics): Yes

South Africa (South African Reserve Bank and Stats SA): Yes

South Korea (Bank of Korea): Yes

Spain (INE - NATIONAL STATISTICS OFFICE): Yes

Sweden (Statistics Sweden, NSI): No

Switzerland (SFSO): Yes

Türkiye (TurkStat): Yes

Ukraine (State Statistics Service of Ukraine): Yes

United Kingdom (UK Statistics Authority): Yes

United States (Bureau of Economic Analysis): Yes

International organization (UNSD): Yes

Vietnam (General Statistic Office): Yes

Yemen (Central Statistics Organization): Yes

Zimbabwe (Zimbabwe National Statistics Agency): Yes

Zimbabwe (Zimbabwe National Statistics Agency (Zimstat)): Yes

Российская Федерация (Федеральная служба государственной статистики): Yes

Q1B. Do you have any comments on this recommendation?

Australia (Australian Bureau of Statistics): We agree that there should be no difference between market and non-market producers and that a return of capital should be included. Consistent guidance should be provided to help with the rate of return.

Belgium (National Bank of Belgium): This would remove the inconsistency in the valuation of output using the sum of costs approach between market and non-market producers, which cannot be justified.

Canada (Statistics Canada): The GN highlights the fact that including this return to capital will have very little impact on the aggregate estimates and will be self-balancing (incomes and expenditures). It is not clear, despite the desire for consistency between market and non-market producers, if this means the exercise is warranted given other priorities or if it should be recommended in the manuals with targets dates on adoption so as to continue to ensure international comparability. Introducing a return on capital would also add some subjectivity to the measure of GDP allowing countries leeway in how much GDP could be added.

Additionally, the reasons for why a return on capital for non-market producers was not included in the SNA 2008 are not clear. The 2008 SNA does not provide a conceptual reason for the exclusion, but the GN concludes this was due to lack of consensus, it would have been instructive to more clearly understand why this lack of consensus existed beyond disagreements regarding a discount rate. The fact that market and non-market producers are indeed quite different in terms of motives, legal structures, and production functions is fundamental. While non-market producers and market producers may use similar types of fixed capital (buildings, office supplies, etc.) it is more likely that the actual usage at a detailed asset level is in fact very different. Market and non-market producers have different types of capital assets with different services lives and these are used for different objectives.

For non-profit institutions, while they can generate surpluses and deficits, all else being equal, the inclusion of a return to capital may result in persistent surpluses. For net lending/borrowing among sectors where non-market producers are the norm, there are also questions on how this change would tie into the financial account and balance sheet: are persistent surpluses related to a buildup in a particular asset? Additionally, the inclusion of replacement cost consumption of fixed capital is a realistic method for highlighting how non-profits and other non-market-producers maintain their capital stock. In the case of non-profit institutions, their actual returns are frequently limited by tax legislation.

As well, there are no clear examples of non-market producers engaged in the extraction of natural resources in Canada. Other countries may see government involvement in this respect and so it seems like a case where applying a return to capital is reasonable, but would a non-market extractor really be measured as a sum of costs?

Denmark (Statistics Denmark): Theoretically, we think a return to capital should be included. However, we have some concerns regarding the practical implementation, fx changes in interest rates over time. To avoid too much work in when compiling statistics, we think a pragmatic solution is necessary.

Egypt, Arab Republic (The Central Agency for Public Mobilization & Statistics): This capital is used in the production process. If it is leased it has to pay the rent (cost of production) and if it is owned, has to maintain (intermediate consumption). Thus, they have to include return to capital.

Georgia (National Statistics Office of Georgia): For many countries it will be difficult to implement this recommendation, as there will be problematic issues regarding the choice of the discount rate. It would be difficult to explain why the government have a surplus or deficit, when the government is considered as a non-profit producer.

Germany (Destatis (Federal Statistical Office)): From our point of view, non-market producers use to operate at break-even and not for profit, as there is no market for their output. Therefore, we do not see any need for a change in the sum-of-cost-approach for non-market producers.

Moreover, the proposal has important undesirable consequences for Excessive Deficit Procedure (EDP) statistics that are simply not acceptable (effect on deficit and debt of general government which is purely arbitrary and due to the fact that the capital costs would then be double-counted – once as interest payment and twice as return to capital).

Israel (Central Bureau of Statistics): We do not think that there should be a complete consistency between the estimation of market output and non market output . For example, in outsourcing, the cost of services in the government after adding a return to capital will still be different from the cost of services for market producers because the salary levels are different .

Italy (Istat): It would be correct from a theoretical point of view, but it is difficult to implement and could introduce inconsistencies in comparison with other countries.

Malta (National Statistics Office): The concept is theoretically incorrect. Non-market producers like the General Government sector provides goods and services generally for free or below market price. No profits are made.

Mauritius (Statistics Mauritius): The inclusion of return to capital for market producers (holding companies) is recommended, not for non-market ones. It will possibly have a significant impact on the output for non-market producers.

México (National Institute of Statistics and Geography (INEGI)): It is considered essential to make explicit in the SNA 2025 that the measurement of the return to capital must be included in the production costs of non-market producers, even though, in practice, there is no international consensus on how to perform said measurement that allows making the statistics comparable.

The development of the experimental statistics derived from the implementation of this recommendation will allow for estimating the impact that will be had on the gross surplus and other macroeconomic aggregates. The results of the investigations, as well as the empirical data, should be the guide for decision-making and develop a methodological note.

Nederland (Statistics Netherlands (CBS) and De Nederlandsche Bank (DNB)): Better for consistency, but difficult to obtain data

New Zealand (Statistics New Zealand): The provision of goods and services via non-market producers isn't intended to generate a return on capital in the same way that market producers do. Adding a return to capital to non-market producers only makes sense if the market and non-market producers make decisions and operate in the same way. This is clearly not the case, market returns may be negative. So, is applying the same treatment to non-market producers appropriate?

Nicaragua (Banco Central de Nicaragua): Yes, in practice, the adoption of the recommendation will depend on the availability of balance sheets that allow measuring the value of the assets used in production.

Norway (Statistics Norway): It is not uncommon that general government investment projects in Norway are found to be unprofitable under a cost/benefit analysis and there would thus be no return to this capital. A return to capital would therefore need to be motivated by the alternative use of this capital: Theoretically, it could have been invested somewhere else, thereby generating a return. This would be in line with the reasoning underpinning the cost/benefit analysis, as they are carried out by the Norwegian Ministry of Finance.

However, including additional imputed values is costly for users, because it makes the results harder to understand and more uncertain. It is not clear how including such an

imputed cost would make the national accounts data more useful for policy analysis, and on balance we believe this option should not be pursued.

Portugal (Statistics Portugal): We do not share the view that the current valuation of the production of non-market producers is inconsistent with that of market producers by not including a return on capital.

If we accept conceptually that non-market producers behave in a different way compared to market producers, as they do not seek profits, then the difference in valuation is perfectly acceptable (and, in fact, appropriate).

Thus, we prefer maintaining the current valuation (not including a return on capital).

Singapore (Singapore Department of Statistics): Conceptually, if the non-market output has been valued similar to a market output, the non-market output producer would want to recover the capital costs they incur in producing the output. The task force could consider providing more guidelines on an appropriate rate of return for capital.

South Africa (South African Reserve Bank and Stats SA): The inconsistency created by exclusion of capital from estimation of output from non-market producers should be resolved. It would seem difficult to argue on conceptual grounds that the cost structures faced by non-market producers are different to those faced by market producers. Capital cost does not depend on whether you are a market or non-market producer. When capital assets are used in production, this clearly adds value to the production beyond the depreciation of these assets.

Spain (INE - NATIONAL STATISTICS OFFICE): We agree with the theoretical argument for the inclusion, but it's also necessary to point out that then one more real non-observed component would be included in the calculation based on hypotheses and assumptions that it will make even more difficult to compare the non-market output and GDP between countries.

Sweden (Statistics Sweden, NSI): For statistical reasons we should avoid imputations in the national accounts unless it adds to the descriptive substance. Economic behavior, including the pricing policy of output, differs between institutional sectors. Market producers in the corporate sectors act for profit since they depend on owners that expect a return on the money they have invested. A return to capital is needed either to expand business and increase the value of shares or to pay dividends to the owners. Non-market producers on the other hand do not primarily rely on external financiers that expect something is return. Government finances is activities mainly with taxes and have no need to make profits. The same goes for NPISH who rely on membership fees, gifts and grants but without any monetary return expected by the payers.

If output of market and non-market producers are regarded equal in the volume perspective, i.e. basically the same physical output then the difference in the nominal value should be taken into account when price indices are created for the purpose of calculating

values in fixed prices.

We do not think that return to capital is a genuine cost in the NA (macroeconomic) sense. From a microeconomic point of view return to capital is interpreted to be a capital cost. Return to capital is part of operating surplus since operating surplus are the capital owners' part of the functional income distribution and includes the amount to be paid as dividends. Wages and salaries form the other part in the labour/capital duality. Operating surplus also cover other expenditures like interest, so from a statistical point of view it is not possible to determine the exact amount of the return to capital. The interpretation made in the annex of the guidance note, that capital costs include a return to capital is wrong, but an interpretation made by those who want to change the SNA in the direction of a microeconomic framework. §17.29 uses the original SNA meaning of "capital" costs and therefore we need to add "normal profits" to the estimated output value. Costs in the original SNA meaning is related to the use of human resources and "capital" costs therefore refer to consumption of fixed assets, i.e. the using up of what humans have created and used as "capital" in production.

Ukraine (State Statistics Service of Ukraine): No comments

United Kingdom (UK Statistics Authority): The UK would agree in principle with the recommendation, but would need strong international guidance to support country consistency. There is a concern about the practicality and proportionality.

United States (Bureau of Economic Analysis): BEA already includes a return to own-account intangible capital (software and R&D) using the sum of costs approach for market producers. We agree with adding a return to capital using the sum of costs approach for non-market producers.

International organization (UNSD): , as this will remove any inconsistency issues in the valuation of market and non-market output using the sum of costs method. For example, if a market producer using a particular fixed asset in its productive activity decides to sell this asset to a non-market producer engaging in the same productive activity, it seems difficult to justify why we should include the return to this fixed asset when calculating market output but not non-market output.

Zimbabwe (Zimbabwe National Statistics Agency (Zimstat)): inclusion of return on capital would assist in achieving consistency with the approach for market producers

Q2A. Do you agree with the exclusion of a return to capital for city parks and historical monuments on pragmatic grounds?

Q2A	Frequency
Yes	50
No	5
I don't know/Unsure	9
No response	
Total	64

Albania (Statistical Institute - INSTAT): Yes

Angola (National Statistic Office): I don't know/Unsure

Armenia (Central Bank of Armenia): Yes

Aruba (CBS): I don't know/Unsure

Australia (Australian Bureau of Statistics): Yes

Azerbaijan (The State Statistical Committee of the Republic of Azerbaijan): Yes

Belgium (National Bank of Belgium): No

Canada (Statistics Canada): Yes

Chile (Central Bank of Chile): Yes

Cyprus (Statistical Service of Cyprus): Yes

Denmark (Statistics Denmark): Yes

Egypt, Arab Republic (The Central Agency for Public Mobilization & Statistics): Yes

Finland (Statistics Finland): Yes

France (NSI): Yes

Georgia (National Statistics Office of Georgia): Yes

Germany (Destatis (Federal Statistical Office)): No

Iraq (Central statistical organization): I don't know/Unsure

Ireland (Central Statistics Office): Yes

Israel (Central Bureau of Statistics): Yes

Italy (Istat): Yes

Lithuania (State Data Agency. Statistics Lithuania): Yes

Malaysia (Department of Statistics Malaysia): Yes

Malta (National Statistics Office): Yes

Mauritius (Statistics Mauritius): I don't know/Unsure

México (National Institute of Statistics and Geography (INEGI)): Yes

Nederland (Statistics Netherlands (CBS) and De Nederlandsche Bank (DNB)): Yes

New Zealand (Statistics New Zealand): Yes

Nicaragua (Banco Central de Nicaragua): Yes

Niger (Institut national de la statistique): Yes

Norway (Statistics Norway): Yes

Polska (Statistics Poland): Yes

Portugal (Statistics Portugal): Yes

Republic of Armenia (Statistical Committee): Yes

Singapore (Singapore Department of Statistics): Yes

South Africa (South African Reserve Bank and Stats SA): Yes

South Korea (Bank of Korea): Yes

Spain (INE - NATIONAL STATISTICS OFFICE): Yes

Sweden (Statistics Sweden, NSI): No

Switzerland (SFSO): I don't know/Unsure

Türkiye (TurkStat): Yes

Ukraine (State Statistics Service of Ukraine): Yes

United Kingdom (UK Statistics Authority): Yes

United States (Bureau of Economic Analysis): Yes

International organization (UNSD): Yes

Vietnam (General Statistic Office): Yes

Yemen (Central Statistics Organization): I don't know/Unsure

Zimbabwe (Zimbabwe National Statistics Agency): Yes

Zimbabwe (Zimbambwe National Statistics Agency (Zimstat)): Yes

Российская Федерация (Федеральная служба государственной статистики): Yes

Q2B. Do you have any comments on this recommendation?

Belgium (National Bank of Belgium): Except for reasons related to data availability, we see no need to apply such exclusion. Although their exclusion does not affect comparability

with market producers, the priority should be to accurately reflect the cost of nonmarket producers.

Canada (Statistics Canada): Yes, there is currently a partial lack of information in the existing system to measure these items (i.e., they are not delineated in the balance sheet currently).

Cyprus (Statistical Service of Cyprus): Not available such data analysis

Egypt, Arab Republic (The Central Agency for Public Mobilization & Statistics): No

Georgia (National Statistics Office of Georgia): Difficulties in measurement and compilation approaches withing/between the jurisdictions/time is expected due as the parks and historical monuments may either have only local importance, or the international as well, and they naturally evolve/change on constant basis.

Germany (Destatis (Federal Statistical Office)): At this point, we do not see any need to extend the scope of capital service, so the exclusion of city parks or historical monuments is not the main issue for us.

On the contrary, the selection of assets newly relevant or not seems arbitrary. There seems to be many open questions with regard to practicability, therefore changes should be refrained from here and more testing is necessary.

Italy (Istat): We agree, as city parks and especially historical monuments do not have a market value and estimation would be difficult (and controversial)

México (National Institute of Statistics and Geography (INEGI)): The Advisory Expert Group (AEG) concluded that obtaining data on this type of asset is very limited or nonexistent with a real market valuation. The valuation given in the financial statements is book value that does not correspond to a market value.

Nederland (Statistics Netherlands (CBS) and De Nederlandsche Bank (DNB)): Difficult to obtain data for these items

New Zealand (Statistics New Zealand): Practically New Zealand would struggle with data quality to estimate a reliable return on capital for these.

Portugal (Statistics Portugal): Although we prefer not to consider a return on capital, if this is actually included, we would prefer to exclude city parks and historical monuments.

South Africa (South African Reserve Bank and Stats SA): Balance sheet data on these items is non-existent in the balance sheets in South Africa.

Sweden (Statistics Sweden, NSI): If it is decided that a return to capital should be included in the output value of government and NPISH all assets that are legally owned should be included. Even though the use of city parks is free of charge a park is created and therefore expenditures have been made including the acquisition of the parkland. If city parks are not

included, we will have the strange situation where the land improvement made to the park is included in the capital stock on which return is calculated but not the land value of the park.

Switzerland (SFSO): more flexibility is needed

Ukraine (State Statistics Service of Ukraine): No comments

United Kingdom (UK Statistics Authority): The UK supports the exclusion as long as it is internally consistent with the issue of depletion of natural resources, and corresponding caveat for responding to the recording of natural capital. There is concern over how reliable the estimates of these are and a question of whether they are publicly owned.

United States (Bureau of Economic Analysis): No comments.

International organization (UNSD): However, this raises the question of why other fixed assets such as street lighting and playgrounds are not excluded.

Zimbabwe (Zimbabwe National Statistics Agency (Zimstat)): Data availability can make inclusion difficult, therefore exclusion is the best.

Q3A. Do you agree with the recommendation that the scope of assets for which a return to capital should be recognized should be expanded to include work-in-progress, other inventories (where significant) and non-produced non-financial assets that are used in production?

Q3A	Frequency
Yes	34
No	14
I don't know/Unsure	15
No response	1
Total	63

Albania (Statistical Institute - INSTAT): Yes

Angola (National Statistic Office): Yes

Armenia (Central Bank of Armenia): Yes

Aruba (CBS): I don't know/Unsure

Australia (Australian Bureau of Statistics): Yes

Azerbaijan (The State Statistical Committee of the Republic of Azerbaijan): Yes

Belgium (National Bank of Belgium): Yes

Canada (Statistics Canada): No

Chile (Central Bank of Chile): Yes

Cyprus (Statistical Service of Cyprus): No

Denmark (Statistics Denmark): No

Egypt, Arab Republic (The Central Agency for Public Mobilization & Statistics): Yes

Finland (Statistics Finland): I don't know/Unsure

France (NSI): Yes

Georgia (National Statistics Office of Georgia): No

Germany (Destatis (Federal Statistical Office)): No

Iraq (Central statistical organization): I don't know/Unsure

Ireland (Central Statistics Office): Yes

Israel (Central Bureau of Statistics): Yes

Italy (Istat): Yes

Lithuania (State Data Agency. Statistics Lithuania): No

Malaysia (Department of Statistics Malaysia): Yes

Malta (National Statistics Office): No

Mauritius (Statistics Mauritius): Yes

México (National Institute of Statistics and Geography (INEGI)): Yes

Nederland (Statistics Netherlands (CBS) and De Nederlandsche Bank (DNB)): Yes

New Zealand (Statistics New Zealand): No

Nicaragua (Banco Central de Nicaragua): Yes

Norway (Statistics Norway): No

Polska (Statistics Poland): No

Portugal (Statistics Portugal): I don't know/Unsure

Republic of Armenia (Statistical Committee): Yes

Singapore (Singapore Department of Statistics): I don't know/Unsure

South Africa (South African Reserve Bank and Stats SA): Yes

South Korea (Bank of Korea): No

Spain (INE - NATIONAL STATISTICS OFFICE): I don't know/Unsure

Sweden (Statistics Sweden, NSI): Yes

Switzerland (SFSO): Yes

Türkiye (TurkStat): I don't know/Unsure

Ukraine (State Statistics Service of Ukraine): Yes

United Kingdom (UK Statistics Authority): I don't know/Unsure

United States (Bureau of Economic Analysis): Yes

International organization (UNSD): Yes

Vietnam (General Statistic Office): Yes

Yemen (Central Statistics Organization): Yes

Zimbabwe (Zimbabwe National Statistics Agency): Yes

Zimbabwe (Zimbabwe National Statistics Agency (Zimstat)): Yes

Российская Федерация (Федеральная служба государственной статистики): Yes

Q3B. Do you have any comments on this recommendation?

Australia (Australian Bureau of Statistics): We agree that conceptually this makes sense however think that practically there could be some issues with this treatment and it is unlikely to be able to be implemented in Australia.

Belgium (National Bank of Belgium): The use of other non-financial assets, like that of fixed capital, has a cost for (non) market producers and must also be taken into account.

Canada (Statistics Canada): As it pertains to AI.2, and distinguishing payments for services vs. rent payments, it would be useful to distinguish between land and other natural resources in the application of a rate of return.

Cyprus (Statistical Service of Cyprus): Complexity of calculations and data unavailability for such breakdown

Denmark (Statistics Denmark): Theoretically it should be included. But in order not to complicate the calculation, we think it would be a pragmatic solution not to include a return to capital on work-in progress and other inventories.

Egypt, Arab Republic (The Central Agency for Public Mobilization & Statistics): No

Georgia (National Statistics Office of Georgia): If a contract for sale has been concluded in advance, these buildings and structures under construction should be recorded as gross fixed capital formation, since the government is not itself a producer and order market companies to build or produce something, output of this construction is included in output of market producers and registered as GFCF of the government.

Germany (Destatis (Federal Statistical Office)): As already mentioned, the selection of assets newly relevant or not seems arbitrary. There seems to be many open questions with regard to practicability, therefore changes should be refrained from here and more testing is necessary.

Israel (Central Bureau of Statistics): The answer refers to market producers. Regarding non market producers, see the answer to Q1b.

Italy (Istat): From a theoretical point of view, if the return to capital is computed it is better to confine it to work in progress and non-produced assets used in production. We would exclude inventories otherwise it would be necessary to introduce methodologies to evaluate significancy of inventories.

México (National Institute of Statistics and Geography (INEGI)): It is considered essential to make explicit in the SNA 2025 that this type of asset must also be included in the production costs of non-market producers, even though, in practice, it is difficult to have information.

In the case of the measurements of the work-in-progress in public infrastructure, it is an asset whose estimation comes from administrative records, however, the non-financial assets not produced or other inventories, there is no information available that allows an inference to be made about the return to capital.

More research and empirical data are needed. The results derived from it should be the guide for decision-making and develop a methodological note for its correct measurement.

Nederland (Statistics Netherlands (CBS) and De Nederlandsche Bank (DNB)): Difficult to obtain data for these items

New Zealand (Statistics New Zealand): This extension extends capital services much more broadly. A significant concern in general is the move away from observable and measurable real transactions to modelled transactions. While this would help with specific types of economic analysis it makes understanding the actual drivers of economic activity, the core purpose of the economic accounts, much more difficult which is undesirable. Consider such extensions as supplementary information rather than altering the core?

Proposing to include these items risks focusing too much on the theoretical value at the expense of practicalities and cost of actual implementation. Are the benefits large enough? Also, there are risks for international comparability by including items only where it is

thought to be material but not otherwise.

As noted in the response to the guidance note on rent, for non-produced non-financial assets there is no real choice in using these so they are considered to be separate from the production of goods and services and the produced capital input.

Singapore (Singapore Department of Statistics): Data on the return to capital for the expanded scope of assets may not be readily available and could be difficult to measure.

South Africa (South African Reserve Bank and Stats SA): Work-in-progress needs to be financed and these costs form part of the value of production where significant. If production involves the use of non-produced non-financial assets, then a return on these assets should be included in the sum of costs approach.

Spain (INE - NATIONAL STATISTICS OFFICE): Adding also a return on these aggregates leads to more hypotheses and assumptions to the calculation while measuring their real use in the production process is not as clear as in the case of the capital factor (Q.1)

Sweden (Statistics Sweden, NSI): All assets that represent expenditures in the past and current periods should be included.

Ukraine (State Statistics Service of Ukraine): No comments

United Kingdom (UK Statistics Authority): The UK would need to see strong international guidance before making a decision. The UK would need to understand the implications this could have on other guidance notes and how this would be dealt with. The UK is reluctant to give a view before reviewing additional guidance.

United States (Bureau of Economic Analysis): BEA does not currently add a return to capital for these types of assets, but we agree that adding a net return makes sense.

International organization (UNSD): The note says valuables should be excluded on pragmatic grounds. It may be better to say valuables are excluded on conceptual grounds as the 2008 SNA says that they are not used primarily for purposes of production or consumption but are held as stores of value over time.

Zimbabwe (Zimbabwe National Statistics Agency (Zimstat)): Work-in-progress needs to be financed this means that the costs of financing are part of the value of production.

Q4A. Do you agree that the depletion of natural resources should be explicitly added as a cost (where relevant) to the sum of costs approach?

Q4A	Frequency
Yes	33
No	17
I don't know/Unsure	13
No response	1
Total	64

Albania (Statistical Institute - INSTAT): Yes

Angola (National Statistic Office): I don't know/Unsure

Armenia (Central Bank of Armenia): Yes

Aruba (CBS): I don't know/Unsure

Australia (Australian Bureau of Statistics): Yes

Azerbaijan (The State Statistical Committee of the Republic of Azerbaijan): Yes

Belgium (National Bank of Belgium): No

Canada (Statistics Canada): No

Chile (Central Bank of Chile): Yes

Cyprus (Statistical Service of Cyprus): No

Denmark (Statistics Denmark): No

Egypt, Arab Republic (The Central Agency for Public Mobilization & Statistics): Yes

Finland (Statistics Finland): No

France (NSI): Yes

Georgia (National Statistics Office of Georgia): Yes

Germany (Destatis (Federal Statistical Office)): No

Iraq (Central statistical organization): I don't know/Unsure

Ireland (Central Statistics Office): Yes

Israel (Central Bureau of Statistics): Yes

Italy (Istat): No

Lithuania (State Data Agency. Statistics Lithuania): I don't know/Unsure

Malaysia (Department of Statistics Malaysia): Yes

Malta (National Statistics Office): No

Mauritius (Statistics Mauritius): Yes

México (National Institute of Statistics and Geography (INEGI)): Yes

Nederland (Statistics Netherlands (CBS) and De Nederlandsche Bank (DNB)): Yes

New Zealand (Statistics New Zealand): No

Nicaragua (Banco Central de Nicaragua): Yes

Niger (Institut national de la statistique): No

Norway (Statistics Norway): No

Polska (Statistics Poland): No

Portugal (Statistics Portugal): I don't know/Unsure

Republic of Armenia (Statistical Committee): Yes

Singapore (Singapore Department of Statistics): Yes

South Africa (South African Reserve Bank and Stats SA): Yes

South Korea (Bank of Korea): No

Spain (INE - NATIONAL STATISTICS OFFICE): No

Sweden (Statistics Sweden, NSI): Yes

Switzerland (SFSO): No

Türkiye (TurkStat): Yes

Ukraine (State Statistics Service of Ukraine): I don't know/Unsure

United Kingdom (UK Statistics Authority): Yes

International organization (UNSD): I don't know/Unsure

Vietnam (General Statistic Office): Yes

Yemen (Central Statistics Organization): Yes

Zimbabwe (Zimbabwe National Statistics Agency): Yes

Zimbabwe (Zimbabwe National Statistics Agency (Zimstat)): Yes

Российская Федерация (Федеральная служба государственной статистики): I don't know/Unsure

Q4B. Do you have any comments on this recommendation?

Australia (Australian Bureau of Statistics): We agree with the addition of depletion explicitly to the sum of costs approach as we agree that it is a cost of production.

Canada (Statistics Canada): Business accounting depletion and SNA depletion are different concepts with the former reflecting the specific costs more directly/explicitly borne by the extractor. It is not clear if considering the depletion of extracted resources as a cost reflects the correct reality of extractors (i.e., net operating surplus that was net of depletion coupled with dividend payments to shareholders based on pre-cost-of-depletion incomes that result in persistent net dissaving; meanwhile net lending/borrowing is unchanged). Challenges also remain in estimating depletion at the level of detail required and dealing with negative in-situ prices yielding negative depletion. Moreover, this is an edge case if the application is for situations where natural resource extractors are unable to provide market-value output (which seems unlikely?). A last consideration is the treatment of timber, which in Canada is shown as a non-cultivated biological resource and where the reserve life is effectively infinite. What is the socio-environmental objective of accounting for depletion for effectively limitless and sustainable product such as this? This is not to say that estimates of depletion are not worthwhile, and they are something already produced by Canada within our environmental accounts.

Cyprus (Statistical Service of Cyprus): Complexity of valuation regarding depletion of natural resources.

Denmark (Statistics Denmark): We don't have much experience in compiling balance sheet estimates for natural resources in Denmark and we are worried that it will add some volatility to output using the sum-of-cost approach. It is not clear to us how depletion should be treated at the industry level, in particular for government output, which is used intensively for policy purposes.

Egypt, Arab Republic (The Central Agency for Public Mobilization & Statistics): No

France (NSI): The answer is valid assuming that the rest of the SNA remains the same than the SNA 2008. It is not possible to answer these questions if certain assumptions of other guidance notes must be taken into account.

Georgia (National Statistics Office of Georgia): Conceptually, if return to capital is added to the sum of costs, depletion of natural resource should also be added. It will help in measuring how sustainable the economic growth is, and it is important for measuring the effects (either negative, or positive) the third party might (in)directly inflict on natural resources for the purposes to make the polluter pay, for instance.

Germany (Destatis (Federal Statistical Office)): We have strong practical concerns about a general extension of the sum of costs approach. In most cases depletion of natural resources is no cost factor for companies. Moreover, the issue of positive depletion (regeneration) is not addressed at all.

So, to extend the sum of cost approach and include depletion may lead to problems in other possible cases, as these have not been researched and may have unexpected consequences.

Israel (Central Bureau of Statistics): The answer refers to market producers. Regarding non market producers, see the answer to Q1b.

Italy (Istat): Hard to estimate, moreover natural resources should be considered not only based on their impact on current production, but with general wellbeing approach

Mauritius (Statistics Mauritius): Depends on the measurement for depletion of natural resources.

México (National Institute of Statistics and Geography (INEGI)): It is convenient to measure the cost of the depletion of natural resources since it is a crucial element in estimating the impact on the environment and natural resources derived from economic activities, as well as the amount spent on environmental protection.

New Zealand (Statistics New Zealand): Depletion of natural resources, as we understand it, is proposed to impact on net measures at a total economy level only rather than say being applied to industry level series. This appears to be inconsistent with then including depletion of natural resources in the value of sum of costs by say industry. In addition, as per the comments above this would be allowing non-produced non-financial assets to impact on the gross value of production of goods and services. Does this make sense?

Under the split asset approach is the government part, with ownership of mineral resources, to be treated as market or non-market activity? If market, does the production function make sense? If non-market, what ISIC would this be in and what CPC?

Nicaragua (Banco Central de Nicaragua): Conceptually it would be correct; however, natural resources are not normally recorded on government balance sheets due to problems establishing proper valuations for them.

Norway (Statistics Norway): The question of how to handle depletion is under discussion, and the treatment in the sum-of-costs calculation depends on the outcome of this discussion. Statistics Norway will take part in the working group addressing this topic in 2023 and 2024. One possible outcome could be that depletion is treated as an adjustment to income. If so, it is not obvious that it should be included in the sum-of-costs calculation.

Portugal (Statistics Portugal): We are unsure of this approach. We are afraid that this might generate some kind of overlap duplicating values in production account in S13 and S11.

South Africa (South African Reserve Bank and Stats SA): Where relevant the depletion should be added. The cost of depletion of natural resources is comparable or should be looked at as consumption of fixed capital.

South Korea (Bank of Korea): It must first be determined to treats natural resources the same or similar to other production assets.

Spain (INE - NATIONAL STATISTICS OFFICE): It should be taken into account only in the calculation of net aggregates.

Sweden (Statistics Sweden, NSI): If a natural resource is used in the non-market activity and this resource is depleted, then it might be relevant to include depletion in the sum of cost approach. This recommendation is not very relevant. Normally activities that accounts for depletion of natural resources are producing market output.

Ukraine (State Statistics Service of Ukraine): Due to the complexity of estimating the value of natural resources

United Kingdom (UK Statistics Authority): The UK agrees in principle but would need to seek further guidance.

International organization (UNSD): Some quantitative assessment of how much nominal output will increase as a result of adding this component should be made first before any decision is made. An assessment of how to calculate volume measures of output which are derived using the sum of costs method after including this component should be made too. For example, some compilers obtain volume measures of output which are derived using the sum of costs using appropriate wage indices. Can this method still be used after the depletion of natural resources is added?

Zimbabwe (Zimbabwe National Statistics Agency (Zimstat)): When the resources are depleted meaning there are costs associated

Q5A. Do you agree with the recommendation that rent should explicitly be added to the sum of costs approach?

Q5A	Frequency
Yes	41
No	12
I don't know/Unsure	11
No response	
Total	63

Albania (Statistical Institute - INSTAT): Yes

Angola (National Statistic Office): Yes

Armenia (Central Bank of Armenia): Yes

Aruba (CBS): I don't know/Unsure

Australia (Australian Bureau of Statistics): Yes

Azerbaijan (The State Statistical Committee of the Republic of Azerbaijan): Yes

Belgium (National Bank of Belgium): Yes

Canada (Statistics Canada): No

Chile (Central Bank of Chile): Yes

Cyprus (Statistical Service of Cyprus): No

Denmark (Statistics Denmark): Yes

Egypt, Arab Republic (The Central Agency for Public Mobilization & Statistics): Yes

Finland (Statistics Finland): Yes

France (NSI): No

Georgia (National Statistics Office of Georgia): Yes

Germany (Destatis (Federal Statistical Office)): No

Iraq (Central statistical organization): I don't know/Unsure

Ireland (Central Statistics Office): Yes

Israel (Central Bureau of Statistics): Yes

Italy (Istat): I don't know/Unsure

Lithuania (State Data Agency. Statistics Lithuania): Yes

Malaysia (Department of Statistics Malaysia): Yes

Malta (National Statistics Office): No

Mauritius (Statistics Mauritius): I don't know/Unsure

México (National Institute of Statistics and Geography (INEGI)): Yes

Nederland (Statistics Netherlands (CBS) and De Nederlandsche Bank (DNB)): Yes

New Zealand (Statistics New Zealand): No

Nicaragua (Banco Central de Nicaragua): Yes

Niger (Institut national de la statistique): Yes

Norway (Statistics Norway): Yes

Polska (Statistics Poland): No

Portugal (Statistics Portugal): I don't know/Unsure

Republic of Armenia (Statistical Committee): Yes

Singapore (Singapore Department of Statistics): Yes

South Africa (South African Reserve Bank and Stats SA): Yes

South Korea (Bank of Korea): No

Spain (INE - NATIONAL STATISTICS OFFICE): Yes

Sweden (Statistics Sweden, NSI): I don't know/Unsure

Switzerland (SFSO): Yes

Türkiye (TurkStat): Yes

Ukraine (State Statistics Service of Ukraine): Yes

United Kingdom (UK Statistics Authority): Yes

United States (Bureau of Economic Analysis): I don't know/Unsure

International organization (UNSD): I don't know/Unsure

Vietnam (General Statistic Office): Yes

Yemen (Central Statistics Organization): Yes

Zimbabwe (Zimbabwe National Statistics Agency): No

Zimbabwe (Zimbambwe National Statistics Agency (Zimstat)): Yes

Российская Федерация (Федеральная служба государственной статистики): Yes

Q5B. Do you have any comments on this recommendation?

Armenia (Central Bank of Armenia): Sometimes, depending on statistics of real estate market it is difficult to find data about rent, so it will be better to suggest use as alternative approach of valuation a real rate of government bond of estimating the costa of leasing any non-produced non-financial assets for non market producers, and not the same rate as for market producers.

Australia (Australian Bureau of Statistics): We agree with the explicit inclusion of rent in the sum of costs approach as we agree they are a cost of production, particularly in the

context of other updates to the 2008SNA including the measurement of own account data assets and natural resources.

Belgium (National Bank of Belgium): We agree that for conceptual reasons, this is indeed a cost undertaken by producers, rents should be included in the sum of production approach. This nonetheless raises implementation issues as finding estimates for this kind of cost can be difficult

Canada (Statistics Canada): As discussed in AI.2, if we estimate the sum-of-costs approach to include a return (i.e., normal profit/surplus) then the resource royalty payments (i.e., rent) should be included in this expected return rather than as a direct input into their production process shown explicitly in the production account.

Cyprus (Statistical Service of Cyprus): 1. Not clear for which category of assets rents in this case are mentioning to.

2. In case of natural resources or land, for these categories of assets rents are already classified as property income and not as intermediate consumption.

Moreover, we would like to recall the conceptual difference between rents (property income) and rentals (payment of a service).

Egypt, Arab Republic (The Central Agency for Public Mobilization & Statistics): No

France (NSI): The answer is valid assuming that the rest of the SNA remains the same than the SNA 2008. It is not possible to answer these questions if certain assumptions of other guidance notes must be taken into account.

Georgia (National Statistics Office of Georgia): At least implicitly, rent is anyway incorporated in market prices. Besides, it will help to eliminate inconsistency in the valuation of output using market prices and using the sum of costs approach, especially in case of the production of GFCF for own final use.

Germany (Destatis (Federal Statistical Office)): Even if, according to GN AI.2, the inclusion of rent in the sum of cost approach seems methodologically reasonable, we still have strong practical concerns about a general extension of the sum of costs approach. As mentioned above, to extend the sum of cost approach and include rent (or depletion) may lead to problems in other possible cases, as these have not been researched and may have unexpected consequences.

Israel (Central Bureau of Statistics): The answer refers to market producers. Regarding non market producers, see the answer to Q1b.

Italy (Istat): Adding rents would be correct if the sum of costs approach is modified for both market and non-market producers

México (National Institute of Statistics and Geography (INEGI)): It is considered essential to make explicit in the 2025 SNA the inclusion of the leasing costs of any non-

financial asset within production costs, even though, in practice, it is difficult to have information.

More research and empirical data are needed. The results that derive from it should guide decision-making and develop a methodology for its correct measurement.

New Zealand (Statistics New Zealand): As per the response in the rent guidance note questionnaire and above

Portugal (Statistics Portugal): We are unsure of this approach. We are afraid that this might generate some kind of overlap, duplicating values in production account in S13 and S11.

South Africa (South African Reserve Bank and Stats SA): Rent cost are input to production so it should form part of costs. Without rent cost there will be an inconsistency in applying the sum of cost approach.

South Korea (Bank of Korea): With return to capital and operating surplus, rent can also be processed in the primary income account as part of the operating surplus.

Spain (INE - NATIONAL STATISTICS OFFICE): GN should be expanded to take into account the indirect impact of this redefinition of the sum of costs approach in the market/non-market test, and the possible consequence of new units being reallocated to S.13 as a consequence of the increase in the production costs.

Sweden (Statistics Sweden, NSI): The issue of rent as a cost depends on the decision of a separate guidance note (AI.2) not yet finalised. Depending on the outcome of this GN rent might be included in the production costs. Since payments of rent in many cases are included in the rental of buildings and structures there is a practical problem of separation the pure rent from the rental. When separation is not possible the current SNA recommends that rentals that include rent should be included in costs when the rent part is estimated to be the minor part. The current principle is that rent is a redistribution of income paid by the user to the owner of land and other natural resources.

Ukraine (State Statistics Service of Ukraine): No comments

United Kingdom (UK Statistics Authority): The UK agrees in principle on condition it does not conflict with the UK's decision on the AI.2 Treatment of Rent in the National Accounts question. If the decision in the AI.2 paper is different to the UK's position, the answer to this question could change.

United States (Bureau of Economic Analysis): We agree that depletion is an important concept to measure. However, we are concerned that adding depletion presents significant measurement challenges. The relevant commodity prices may be very volatile. Accordingly, we have some concerns about adding measures of depletion to our core accounts.

International organization (UNSD): As above, some quantitative assessment of how much nominal output will increase as a result of adding this component should be made first any decision is made. An assessment of how to calculate volume measures of output which are derived using the sum of costs method after including this component should be made too. For example, some compilers obtain volume measures of output which are derived using the sum of costs using appropriate wage indices. Can this method still be used after rent is added? In addition, if rent is added to the sum of costs approach, in which account will it be recorded? Recording it in the production account on the same basis as intermediate consumption will result in a decrease in value added and affect productivity estimates.

Zimbabwe (Zimbabwe National Statistics Agency (Zimstat)): Rent is an input to production, therefore it should be added as costs.