Twenty-first meeting of the Advisory Expert Group on National Accounts

Washington, D.C. October 18–20, 2022 SNA/M4.22/8

AI.2 Treatment of Rent in the National Accounts

AI.2 Treatment of Rent in the National Accounts

I. Introduction

In the 2008 SNA, rent concerns the payments and receipts for leasing (non-produced) natural resources. The main reason for treating the leasing of these assets as rent, instead of the provision of services, seems to mainly relate to the point of these assets having an infinite life, thus not subject to deterioration in the form of depreciation or consumption of fixed capital.

Explicitly, and sometimes more implicitly, the delineation of rent has been questioned in a number of Guidance Notes drafted in respect of the update of the 2008 SNA. First of all, Guidance Note WS.6 on "Economic ownership and depletion of natural resources" recommends to record depletion of mineral and energy resources as a cost of production, as a consequence of which the relevant natural resources are not treated anymore as having an infinite life. This potentially points in the direction of recording the receipts and payments linked to the leasing of mineral and energy resources as output and intermediate consumption.

Furthermore, and very much in line with Guidance Note WS.6, Guidance WS.8 on "Accounting for biological resources" also recommends to treat depletion as a cost of production, while the regeneration of these resources is recorded as gross fixed capital formation. In addition, the Guidance Note questions the distinction between cultivated and non-cultivated biological resources, recommending a continuum from intensely managed to totally undisturbed for non-migrating biological resources as a starting point, as a consequence of which all these resources would be looked upon as being cultivated.

Implicitly, this also affects the boundaries between recording rent (which is the guidance for recording the leasing of non-cultivated resources) versus output/intermediate consumption (which is the relevant guidance for recording the leasing of cultivated biological resources). Whatever the results regarding the guidance in the 2025 SNA, in practice it will be very difficult to distinguish between transactions for leasing cultivated resources versus those for leasing non-cultivated resources.

_

¹ Please note that the 2008 SNA is not explicitly addressing the recording of leasing cultivated biological resources. One simply has to assume that the relevant receipts and payments are to be recorded as output and intermediate consumption, because these resources are not part of (non-produced) natural resources.

More generally, in an earlier version of the Guidance Note on biological resources, it was questioned whether the difference in accounting for leasing produced assets versus leasing non-produced assets is still a valid one, and whether this distinction is useful from an analytical point of view. In addition to the issues around the notion of infinite life raised above, it was argued, for example, that the most significant part of transactions related to leasing of land, i.e., the leasing of land underlying structures, are implicitly recorded as output and consumption of goods and services.

Finally, Guidance Note DZ.6 on "Recording of data in the national accounts" discusses the recording of payments for "observable phenomena", such as the tracking of data on personal behaviour, as a source of information for the ability to provide more targeted advertising services. In the end, it was recommended to not consider such payments as payments for data per se, but to record them as rent, by looking upon these payments as payments for getting access to the relevant data, as payments for giving up "privacy". Such an accounting also raises the question of how to record receipts and payments for leasing non-produced assets, which are not natural resources. For this type of arrangement, which may also concern the leasing of e.g., marketing assets², the 2008 SNA currently does not provide any guidance at all.

In addition to the question of how to account for the payments for access to observable phenomena, Guidance DZ.6 also puts forward proposals to enlarge the scope of expenditures in applying the sum-of-costs approach for valuing own-account capital formation, by also including rent. Moreover, it is proposed to reconsider the allocation of rent in the sequence of institutional sector accounts, by potentially moving the relevant transactions upwards.

Given all these questions, and the lack of clear guidance on the leasing of certain types of assets, it was proposed, and subsequently endorsed by the Inter-Secretariat Working Group on National Accounts (ISWGNA) and the Advisory Expert Group (AEG) on National Accounts, to prepare a Guidance Note on the delineation and recording of rent, in the context of updating the 2008 SNA. This would also include a discussion on the positioning of these transactions in the accounts, including their contribution to production.

Despite the fact that the issue as such was not on the agreed SNA Research Agenda, it is clear that the accounting for rent emerged as a horizontal issue from the work on several topics on the SNA Research Agenda. One could also add that an overall approach, with a more holistic take on the accounting for rent, is warranted, given the fact that it has not been revisited for many decades.

-

² Marketing assets are treated as non-produced assets in SNA 2008. GN G.9 proposes that marketing assets be treated as produced assets in the updated SNA.

This Guidance Note starts, in Section II, with a more extensive overview of the current guidance for the delineation and recording of rent. Subsequently, Section III lays out the various options one could consider when it comes to the accounting for rent. Sections IV and V provide further information on the recommended approach, first from a more conceptual point of view, and second looking at it from the perspective of practicalities. Section VI concludes this Guidance Note with an overview of the impact of the SNA and other standards and manuals for compiling macro-economic statistics.

II. Existing material

In paragraph 7.109 of the 2008 SNA, rent is defined as "...the income receivable by the owner of a natural resource (the lessor or landlord) for putting the natural resource at the disposal of another institutional unit (a lessee or tenant) for use of the natural resource in production".

Furthermore, as explained in paragraph 17.310 of the 2008 SNA, a resource lease is defined as "... an agreement whereby the legal owner of a natural resource that the SNA treats as having an infinite life makes it available to a lessee in return for a regular payment recorded as property income and described as rent. The resource continues to be recorded on the balance sheet of the lessor even though it is used by the lessee. By convention, no decline in value of a natural resource is recorded in the SNA as a transaction similar to consumption of fixed capital".

Paragraphs 7.153 to 7.158 of the 2008 SNA describe rent (on land and on subsoil assets) in more detail, but are not reproduced here. The most relevant points from these paragraphs are that rent on land is recorded continuously over the period of the lease, and that rent on sub-soil assets includes payments which are often described as 'royalties' and they may be paid in an exploration phase even if no extraction is taking place.

Rent is recorded in the Allocation of primary income account, as a property income, and may be recorded on both the uses and resources sides of the account.

Taking a historical perspective, an entry for "rent" has been present in the SNA since its first edition in 1953, however its definition in that edition was considerably broader than under the current standard:

"Comprises all net income from the possession of land and buildings accruing to households and private non-profit institutions...Royalties received from patents, copyrights and rights to natural resources are also included in this flow."

III. Options considered

In this section, various options are described for three issues related to the recording of rent: (A) the definition of rent, i.e., which payments and receipts for the leasing of (non-produced) non-financial assets should be considered as rent; (B) where in the accounts the payments and receipts of rent should be recorded; and (C) whether or not payments for rent should be included in the sum-of-costs approach for valuing output of specific types of products, for which a market-equivalent price is not available.

A. Recording of payments and receipts for leasing of (non-produced) non-financial assets

The main question that can be derived from the above is how to treat payments and receipts for the leasing of non-produced non-financial assets. It is clear that any payments related to the leasing of produced non-financial assets are to be recorded as rental services, but there is less clarity about the recording of flows related to the leasing of non-produced non-financial assets.

Currently, only payments and receipts for leasing (non-produced) natural resources are explicitly referred to in the SNA, explaining that these need to be recorded as rent. Given that there could potentially be payments for the use of non-produced non-financial assets other than natural resources, such as those to obtain access to observable phenomena or those related to the use of marketing assets (if not treated as produced assets in the updated SNA), the question arises how to account for these payments: recording them as rent, as exceptions to the general rule for recording only payments for the use of natural resources as rent; extending the general definition for rent, so that rent covers payments for the use of all non-produced non-financial assets; or recording the relevant payments as a provision of a service.

An important underlying question is when to record a payment for the use of an asset as the provision of a service and when to record it as property income. For this purpose, it is important to look at the definitions of production and rent. In this regard, the 2008 SNA defines production as "an activity, carried out under the responsibility, control and management of an institutional unit, that uses inputs of labour, capital, and goods and services to produce outputs of goods and services" (see para. 6.2). Conversely, rent is defined as "the income receivable by the owner of a natural resource (the lessor or landlord) for putting the natural resource at the disposal of another institutional unit (a lessee or tenant) for use of the natural resource in production" (para. 7.109). It then links it to the use of a resource lease, explaining that this is "an agreement whereby the legal owner of a natural resource that the SNA treats as having an

infinite life makes it available to a lessee in return for a regular payment recorded as property income and described as rent" (para. 7.109).

Looking at these definitions and reflecting on various aspects of different types of non-financial assets leads to the following options for the recording of any payments and receipts in relation to their use.

Option A1: Broaden the definition of rent to cover all payments/receipts related to the use of non-financial assets with infinite life span

The current definitions imply that the distinction between recording payments for the use of an asset as the provision of a service or as a form of property income revolves around the question whether the asset is (partially) used up in production or not. If this is the case, the provision of access to the asset is regarded as a service, whereas in the other case it is regarded as property income. If this line of reasoning would be followed, this would lead to the proposal to broaden the SNA definition of rent to include all income receivable by the owner of non-financial assets with an infinite life span for putting it at the disposal of another institutional unit for use in production.

A specific question related to this option concerns the recommendation to look upon depletion as a cost of production, thereby implying that the relevant assets do not have an infinite life. The logical consequence of applying this option would be a change in the recording for payments related to the use of some types of natural assets for which the payments are currently recorded as rent.

More generally, one could argue that almost all non-financial assets, including certain types of land, are subject to some form of deterioration, thus making the need for a separate accounting of rent almost superfluous. Furthermore, this option leaves the question of how to deal with payments for non-produced, non-financial assets with finite life spans unanswered.

Option A2: Broaden the definition of rent to cover all payments/receipts related to the use of non-produced non-financial assets

It could also be argued that the distinction between whether to record a payment as rental (i.e., a service) or as rent (i.e., property income) should be based on whether the underlying asset has been produced or not. In the former case, one could argue that the generation of the asset is the result of a productive activity which does not directly feed into a final product (and related value added), but only indirectly when the fixed asset is used to produce other goods and services (i.e. as a factor of production).

It could therefore be considered relevant to also account for this indirect contribution in the form of production, to obtain comprehensive measures of production, output and value added. In this regard, a lot of the services provided by fixed assets may often also be a direct alternative to providing similar services via labour, so treating them equally is also relevant to ensure consistency in the framework. Non-produced non-financial assets are not the result of a productive activity and their services may also not easily be replaced via labour input. It would thus make less sense to put them on a par with labour and fixed capital in assessing their role in production.

Another aspect that may be of relevance is that fixed assets may require additional activities to maintain and/or replace them. In this regard, para. 7.153 explains that "rentals are payments made under an operating lease to use a fixed asset belonging to another unit where that owner has a productive activity in which the fixed assets are maintained, replaced as necessary and made available on demand to lessees" (underlining by author), implying that this is not the case for non-produced non-financial assets.

In this line of reasoning, the proposal would be to broaden the SNA definition of rent to include all income receivable by the owner of <u>non-produced non-financial assets</u> for putting them at the disposal of another institutional unit for use in production.

Option A3: Broaden the scope of production to also include returns on the use of non-produced non-financial assets

Finally, it could be argued that it shouldn't matter whether the asset is produced or not and whether it has a finite or an infinite life span for recording the income generated by an activity as a result of production. What matters is whether or not the asset is actually used in the generation of income. In this regard, the production boundary states that production is "an activity [...] that uses inputs of labour, capital, and goods and services to produce outputs of goods and services" (para. 6.2 of the 2008 SNA, underlining by author), without specifying what type of capital.

In this line of reasoning, the proposal would be to maintain the definition of production, specifying that it also includes output derived from the use of non-produced assets, and remove rent from property income. This would imply that all returns on non-produced non-financial assets (e.g., receipts by government for allowing access to mineral reserves and (implicit) payments made by data companies to households to access observable phenomena) would be recorded as output of a service and may feed into GDP.

Implicit in this option is that there would be no recording of rent as a specific item in the accounts.

B. Location of payments/receipts of rent in the sequence of accounts

Related to the first question, one could also consider various options for recording the payments/receipts of rent in the sequence of accounts. Rent is currently included in the allocation of primary income account and therefore impacts on the balance of primary incomes (national income) and all balancing items below.

Three options can be distinguished, as follows:

Option B1: Keep the current treatment

If one looks upon rent as a remuneration for the leasing of (specific types of) non-produced non-financial assets, in the same way as a return on financial assets, the current classification would still work.

Option B2: Include rent in the generation of income account

If one does not consider the leasing of non-produced non-financial assets as the production and use of a service, but still consider the payments for the use of the relevant assets as a cost of production, it could be opted to include rent in the generation of income account. This would not affect value added (or GDP), but would impact gross operating surplus and mixed income.³

Option B3: Include rent in the production account

If the remuneration for the use of non-produced non-financial assets would be put on a par with the payments and receipts for the use of fixed assets, the logical consequence is that it would be recorded in the production account, as the provision of a service and as intermediate or final consumption. This would then impact GDP in instances where rent is recorded as final consumption. If this option would be recommended, it also raises the question whether one would prefer to keep payments/receipts for the leasing of non-produced non-financial assets (and/or for the leasing of natural resources) as a separate item, different from rentals.

³ This would not apply to the use of financial capital, as this would already be reflected in the costs of non-financial assets, which may be financed on the basis of this financial capital.

C. Treatment of rent in applying the sum-of-costs approach

Finally, there is a question regarding the treatment of payments for the leasing of non-produced non-financial assets in the application of the sum-of-costs approach used for the measurement of output of specific types of products, for which a market-equivalent price is not available. Notably, rent is currently excluded from the calculation of the sum-of-costs to estimate the value of gross fixed capital formation (GFCF) for own final use and non-market output.

The following options could be distinguished:

Option C1: Maintain the current treatment, i.e., limit the sum-of-cost approach to only include costs related to the use of produced non-financial assets

The first option is to maintain the current guidance, i.e., not including costs related to the use of non-produced non-financial assets in the sum-of-costs approach but only recognize costs related to the use of fixed assets.

Option C2: Broaden the sum-of-cost approach to also include costs related to the use of non-produced non-financial assets

The alternative would be to also include costs related to the use of non-produced non-financial assets. In this regard, it is clear that these 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.

In that respect, it is important to make a distinction between financial and non-financial assets. The former (in the form of liabilities) may be needed to finance production (including the purchase of any capital needed in production), whereas the latter are an actual input into production. This means that the cost of financial liabilities (at least the part that is needed to finance production) are already reflected in the calculation of the returns on non-financial assets used in production, and should therefore not be included in addition to the sum-of-costs.

IV. Recommended approach – conceptual aspects

This section discusses the conceptual aspects regarding the three issues laid out in Section III.

A. Definition, i.e. the recording of payments and receipts for leasing of (non-produced) non-financial assets

It should be noted up-front that, from a conceptual perspective, there is no clearcut solution when it comes to the definition of those transactions which should be recorded as rent. It is clear, however, that the current guidance in the 2008 SNA needs reflection, for two reasons.

First of all, the current SNA does not provide any guidance on the recording of payments/receipts related to the leasing of non-produced non-financial assets other than (non-produced) natural resources.

Secondly, it is recommended, in Guidance Notes WS.6 on "Economic ownership and depletion of natural resources" and WS.8 on "Accounting for biological resources", that depletion of the relevant resources should be recorded as a cost of production. As a consequence, the argument that the payments/receipts related to the leasing of such resources should be recorded as rent, because the relevant assets have an infinite life, would lead to a clear inconsistency in the guidance. And even in the case of the 2008 SNA, the notion of having an infinite life was simply a matter of convention, not substantiated by economic reality. Even though depletion was not considered as a cost of production, it is unequivocally clear that the criterion of having an infinite life does not hold for non-renewable mineral and energy resources, and can only be upheld for (non-cultivated) biological resources if one assumes a sustainable use of these assets. Even land can deteriorate significantly by, for example, natural causes, such as desertification, erosion, etc.

If the status quo would be inappropriate under these conditions, two options remain to consider, either apply option A2, i.e., use the distinction between produced and non-produced assets for recording rent or the provision of a services; or apply option A3, i.e. abandoning the concept of rent altogether, and record all payments/receipts for leasing non-financial assets as a provision of services.

Option A3 seems to have a certain attractiveness from a conceptual point of view, because a sound and straightforward conceptual grounding for distinguishing between produced and non-produced assets is somewhat lacking. Option A2 would be a matter of convention on the basis that natural resources (and by extension other non-produced non-financial assets) represent factors of production rather than inputs to production.

It is important to note one of the consequences of applying option A3 is that the payments for access to data would also need to be accounted for as a form of production by e.g., households. This would not be that problematic in the case of activities performed by households such as completing surveys and the like.

However, to consider giving access to monitoring behaviour as a productive activity looks counterintuitive, to say the least. From a practical point of view, this issue may be almost irrelevant, at least for the time being, but this may change in the future. From a conceptual perspective, it is however very hard to defend.

On the other hand, it is important to acknowledge the fact that an important part of leasing non-produced assets, i.e., the leasing of land underlying dwellings and non-residential buildings, is already implicitly recorded as part of output of housing services or rentals of offices.

Furthermore, in the case of many intellectual property products, such as licensing of e.g. software or the receipts of royalties for music originals, the process of generating income is not that different from leasing natural resources. The process of producing the original leads to the creation of a produced asset different from the appearance of natural resources, but the subsequent process of generating income in the form of license fees and royalties is quite similar to generating income from leasing natural resources. Both require little labour input, in the form of checking the credentials of the client and administering the lease, in addition to the use of the underlying asset.

More generally, one could argue that the whole distinction between produced and non-produced assets becomes more and more blurred. Here, one should acknowledge that, despite the apparent dichotomy between produced and non-produced assets in the 2008 SNA, this distinction is far less straightforward. Land has always been considered as a non-produced asset⁴, but land improvements which are often an indistinguishable part of the value of the relevant land, are treated as produced assets. Also in the case of agricultural land and forest land, part of the value can be attributed to management activities and other direct interventions of humans. Another argument relates to (the value of) various intangible assets. The actual market value of these assets may go well beyond the value of accumulated investment expenditures, due to monopolistic circumstances, which are not that easy to explain as being a product of the more traditional perspective of producing goods and services.

On the other hand, it should be noted that the alternative recording of, for example, natural resource leases as output will change the recording of transactions in relation to these resources quite dramatically. Governments renting out natural resources would become market producers, at least for the activities relating to (the leasing of) natural resources. One also has to figure out how to account for leasing of, for example, mineral and energy resources, the

⁴ Even in the case of land per se, there are clear example of land creation by human intervention. See e.g. the Dutch saying: "God created the earth, but the Dutch created the Netherlands".

income of which may be (partly) appropriated through joint ventures (equity income) and/or special tax arrangements. On the other hand, various changes in the recording of natural resources have already been proposed, such as the split-asset approach⁵, including the accounting for depletion.

All in all, there are arguments for both Options A2 and A3. Option A3 would be a rather fundamental change (with many implications across the SNA), whereas Option A2 - expanding the definition of rent to cover all payments made for the use of any non-produced non-financial assets (i.e., not just natural resources with infinite life spans) – would be a more pragmatic approach to reflect proposals in other Guidance Notes and preserve consistency in the system.

B. Location of payments/receipts of rent in the sequence of accounts

There is a clear link between the option selected in part A above and the presentation of rent in the sequence of accounts. Starting from the assumption that option A2 is selected for recording rents in the case of leasing non-produced non-financial assets, three options are put forward for the location of recording payments/receipts of rent in the sequence of accounts, the first option being to keep the current guidance of the 2008 SNA as is.

However, there are good reasons to consider payments for rents as a cost of production. Implicitly, the rents may include a compensation for the use of capital in the form of depletion or obsolescence. More generally, one may assume that operating surplus does not only include a compensation for the use of assets, but also includes a compensation for a return to invested capital, the latter including the opportunity costs for investing financial means in non-financial assets. Leasing assets can thus be considered as an alternative for investing in the relevant assets, as a consequence of which one would be directly confronted with costs of deterioration and the costs of financing the capital investments.

Applying option B3, moving rent to the production account, has one major advantage. Different from option B2 (and option B1 as well), possible costs related to the generation of this income, such as compensation of employees and intermediate consumption, would not be accounted for before the related income is recorded. However, this option would lead to a change in GDP, insofar as rents affect the sum of final consumption plus exports minus imports.

Should option A2 be selected, then on balance it seems appropriate to adopt option B2 - moving rent into the generation of income account.

_

⁵ This is currently subject to discussion and testing.

C. Treatment of rent in applying the sum-of-costs approach

Given the strong argument set out above that rent is ultimately a cost to producers which is reflected in prices for market output, there is general support for option, C2 i.e., including rent explicitly in the sum-of-costs approach for estimating the value of the production of GFCF for own final use and for estimating non-market output.

V. Recommended approach – practical considerations

Rent is currently a relatively small entry in the accounts for many countries. For example, data for EU Member States show total rent received in the economy to be 0.25% of GDP at EU27 level (2019 data), ranging between 0.5% of GDP in Lithuania to 0.05% in Luxembourg, with most countries between 0.15 and 0.35% of GDP. However it may be more significant for resource-rich countries.

Countries do not seem to have specific practical problems to record rent now. The individual GNs which are related to the rent issue covered in this GN describe potential practical issues to be considered, and in some cases testing will be undertaken.

VI. Changes required to the 2008 SNA and other statistical domains

Depending on the options ultimately recommended, more or less changes would be needed in the SNA, however these would be straightforwardly targeted to the existing sections dealing with rent.

- Options A2 and A3 would require similar changes across the SNA, though Option A2 would focus more on the definitions of rent and references to it.
- Options B2 and B3 would require changes to the sequence of accounts and related text, moving rent to another account.
- Option C2 would require several updates to those SNA sections dealing with the sum-of-costs approach.

Discussions on the treatment of rent for data and marketing assets potentially have impacts on the Balance of Payments, where the relevant flows are cross-border.

Annex – numerical examples

See the annexed Excel spreadsheet.