Refinement of the Asset Boundary in Relation to 'Constructive Liabilities'

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Paper prepared for the 35th IARIW General Conference

Copenhagen, Denmark, August 20-25, 2018

Session 2E: Pushing the Boundaries of the SNA

Time: Tuesday, August 21, 2018 [13:30-14:00]

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Session 2E: Pushing the Boundaries of the SNA
Tuesday, August 21, Afternoon

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[1] The views expressed in this paper are those of the author, and should not be considered as representing the official views of the OECD or of its member countries.

[2] The author would like to thank Peter van de Ven for his comments and suggestions to the paper.

Abstract

The paper proposes a refinement of the asset boundary of the SNA to better specify what is covered under the term 'constructive liabilities'. As this is currently not well-defined, it leaves room for interpretation on its exact delineation which has become apparent in the discussion on the recognition of pension entitlements. Currently only entitlements derived from employment-related pension schemes are recognized in the central framework of the national accounts, whereas social security pension schemes do not lead to the creation of any entitlements or liabilities. This guidance seems to derive from the asset boundary which explains that a liability is usually established via a legally binding contract. However, as the asset boundary also makes a reference to 'constructive liabilities' which are established by "long and well-recognized custom that is not easily refuted", the question arises how this relates to social security pension entitlements. As the distinction between employment-related and social security pension schemes is not always straightforward, this issue has become more prominent in the last couple of years in developing criteria to distinguish which types of pension entitlements to include and which to exclude from the accounts. More guidance is needed on the exact interpretation of 'constructive liabilities' to better define and delineate the asset boundary, and to assess, among other things, how it would affect the current treatment of various types of pension schemes.

The paper presents the asset boundary as defined in the 2008 SNA and discusses how the current guidance on the (non-)recognition of pension entitlements seems to be in contradiction, relating to the part of the asset boundary that refers to constructive liabilities. The paper explains the need for a clearer definition and delineation of these constructive liabilities, linking it to terminology used in other statistical manuals as well as in international accounting standards. It also discusses the pros and cons of including these types of liabilities in the national accounts. In assessing the possible impact on national accounts, the paper provides an example of how the recognition of social security pension entitlements and liabilities would affect the accounts of the relevant sectors. It is shown that the impact will not be confined to the financial accounts and balance sheets, but that it will also affect non-financial accounts, including balancing items such as savings and net lending/ borrowing.

Keywords: National Accounts, Asset boundary, Social security, Pensions

1. Introduction

1. The System of National Accounts (SNA) is a framework that describes economic activity according to a strict set of concepts, definitions, classifications and accounting rules, which ensure that the accounts are comprehensive, consistent and coherent. An important role in this framework is played by the so-called ‘boundaries’ which define what should be included and what should be excluded from the accounts. The production boundary for example defines what is covered in the production of goods and services in the national accounts, whereas the asset boundary defines what constitutes an asset according to the SNA.

2. Most of the time, the boundaries provide clear guidance and their application is rather straightforward. However, sometimes discussion arises regarding their correct interpretation which in some cases may even lead to a further refinement of a boundary. An issue recently emerged with regard to the asset boundary in relation to the (non-)recognition of pension entitlements. Currently only entitlements derived from employment-related pension schemes are recognized in the central framework of the national accounts, whereas social security pension schemes do not give rise to the creation of any entitlements or liabilities. This guidance seems to derive from the asset boundary which explains that a liability is usually established via a legally binding contract. However, as the asset boundary also refers to ‘constructive liabilities’ which are established by “long and well-recognized custom that is not easily refuted” (see §3.34 of the 2008 SNA), the question arises how this relates to the current non-recognition of social security pension entitlements and liabilities in the accounts. As the term ‘constructive liabilities’ is not well-defined in the SNA 2008, it currently leaves room for interpretation on its exact delineation. For that reason, there is a need for a clearer definition of ‘constructive liabilities’ and an assessment of whether these should be included or excluded from the accounts.

3. This paper proposes a refinement of the asset boundary in relation to ‘constructive liabilities’, and discusses the pros and cons of including these types of liabilities within the asset boundary. Section 2 first explains how this issue emerged on the basis of a discussion on developing criteria to distinguish which types of pension liabilities to include in the national accounts. Section 3 then provides a description of the asset boundary as defined in the 2008 SNA. Subsequently, Section 4 discusses the interpretation of these ‘constructive liabilities’, also in relation to terminology and guidance used in other manuals and international accounting standards. Section 5 then describes pros and cons of including these types of liabilities in the accounts. Section 6 provides an example of how the recognition of social security pension entitlements and liabilities would affect the accounts of the relevant sectors. The paper ends with some concluding remarks in Section 7.

2. What triggered the issue: Employment-related versus social security pension schemes

4. The issue on the correct interpretation of ‘constructive liabilities’ as mentioned in the 2008 SNA was triggered by a discussion on the inclusion or exclusion of specific types of pension entitlements in the national accounts. This relates to changes in the 2008 SNA with regard to the recording of pension entitlements and liabilities that leave room for discussion and that require further guidance.

5. The 1993 SNA only required the recognition and recording of pension liabilities for funded "private" schemes. As a result, the national accounts of most countries did not include any pension liabilities related to social security and unfunded employment-related pension schemes. As the set-up of pension schemes substantially differs across countries, this meant that the information on pension entitlements provided by the national accounts was neither fully comparable nor comprehensive. To address this issue, the recording of pensions was changed considerably in the 2008 SNA. According to the new guidance, liabilities (and entitlements) related to employment-related pension schemes are recognized in the national accounts, regardless of whether or not they are funded (see §9.20, §11.107 and §17.121 of the 2008 SNA), whereas pensions due under social security do not lead to the accrual of entitlements of households that have to be regarded as assets (see §9.20 and §17.124 of the 2008 SNA). Furthermore, a supplementary table was included in the 2008 SNA that covers information on all social insurance pension liabilities to arrive at an internationally comparable set of pension data.

6. Whereas the updated guidance led to more clarity on the treatment of pensions, some ambiguity still remained, as it is not always straightforward to clearly distinguish between employment-related pension schemes and social security pension schemes. For that reason, the 2008 SNA allows some flexibility for employment-related pension schemes that are intertwined with more generic social security type of schemes (see §17.193). These intertwined schemes need not be recorded in the central framework of the national accounts, but only in the supplementary table. The 2008 SNA also states that a set of criteria should be developed "to explain the distinction between those schemes carried forward to the core accounts and those recorded only in the supplementary table" (see §17.193 of the SNA) to solve this ambiguity.

7. To address this issue, the Advisory Expert Group on National Accounts (AEG) started exploring criteria to distinguish between pension liabilities to be recorded in the central framework of the national accounts and those that only need to be included in the supplementary table. In general, there are two options to deal with this issue (see Zwijnenburg (2016)). As the ambiguity mainly arises around employment-related schemes that are intertwined with social security, one solution is to develop clear criteria to distinguish between employment-related and social security schemes. A second option is to look at the asset boundary of the SNA, looking at whether the entitlements under a specific scheme qualify as an asset. In theory, both options should lead to the same outcome.

8. In exploring the second option, it became clear that there is a specific part of the asset boundary that is currently not well-defined in the 2008 SNA and that leaves room for interpretation. Whereas it is relatively straightforward to interpret the part of the asset boundary that relates to liabilities that derive from a legally binding contract, it is less obvious to interpret the part that relates to 'constructive liabilities' which derive from a "long and well-recognized custom that is not easily refuted". As 'constructive liabilities' are not well-defined in the 2008 SNA, it creates a problem to appropriately interpret this part of the asset boundary to assess whether certain types of pension liabilities should be included in the central framework. Furthermore, it creates the question how to regard the current exclusion of liabilities of certain types of social security schemes in relation to these 'constructive liabilities'. This emphasized the need to better define these types of liabilities and to assess whether they should indeed be included or excluded from the asset boundary.

3. Asset boundary in the 2008 SNA

9. Before discussing the interpretation of ‘constructive liabilities’, this section first provides an overview of the asset boundary as defined in the 2008 SNA. The asset boundary is defined in §1.46 which states that balance sheets “record the value of the assets that [institutional units or sectors] own or the liabilities they have incurred”. Economic ownership is an important concept with regard to the asset boundary. It is defined in §3.26, which states that “the economic ownership of entities […] is the institutional unit entitled to claim the benefits associated with the use of the entity in question in the course of an economic activity by virtue of accepting the associated risks”. From that definition, ‘assets’ and ‘liabilities’ are further defined in §3.5 and §3.33 respectively. Assets are “entities that must be owned by some unit, or units, and from which economic benefits are derived by their owner(s) by holding or using them over a period of time”. “A liability is established when one unit (the debtor) is obliged, under specific circumstances, to provide a payment or series of payments to another unit (the creditor).” It is explained that a liability is most commonly established via a legally binding contract that specifies the terms and conditions of the payment(s) to be made and that payment according to the contract is unconditional. However, §3.34 explains that a liability may also be established “not by contract but by long and well-recognized custom that is not easily refuted”. In the latter case, the creditor has “a valid expectation of payment, despite the lack of a legally binding contract”. These liabilities are called ‘constructive liabilities’. §11.6 adds that “some payments by government to individuals fall under this category”.

10. In describing the asset boundary, the SNA also provides explanation of what is not covered. §2.34 explains that as the coverage is limited to those assets that are subject to ownership rights and from which economic benefits may be derived, “consumer durables, human capital and those natural resources that are not capable of bringing economic benefits to their owners are outside the scope of assets in the SNA”. Furthermore, it is explained that contingent assets and liabilities are ‘in general’ not included in the central framework. These are liabilities in which “one party is obliged to provide a payment or series of payments to another unit only if certain specified conditions prevail” (see §3.40). This means that “there is uncertainty about whether there will be a payment required or not” (see §11.23). It is also explained that an exception is made for “standardized guarantees where, although each individual arrangement involves a contingent liability, the number of similar guarantees is such that an actual liability is established for the proportion of guarantees likely to be called” (see §3.40).

11. Looking at the asset boundary of the SNA, it is clear that all items that are established via a legally binding contract should be recorded in the central framework. However, the reference to ‘constructive liabilities’ creates ambiguity about its proper interpretation. The SNA does not contain much guidance in that respect as these types of liabilities are only mentioned in §3.34, §3.40 and §11.6. The only explanation provided in these paragraphs is that these liabilities are established “*by long and well-recognized custom that is not easily refuted*” and that the creditor has “*a valid expectation of payment, despite the lack of a legally binding contract*”. However, no specific criteria are provided to clearly delineate these types of liabilities. This requires the need to further specify what is covered by these types of liabilities.

4. Interpretation of 'constructive liabilities'

12. In order to better define 'constructive liabilities', this section explores whether these types of liabilities are mentioned in other manuals and international accounting standards, and whether guidance may be derived from that.

13. When looking at other statistical manuals, they do not contain explicit references to the term 'constructive liabilities'. To assess whether this implies that these kinds of liabilities are not covered within their systems or whether these manuals also regard constructive liabilities as items that need to be included in the accounts, it is relevant to look at their specific definitions of assets and liabilities.

14. The ESA 2010 defines a financial claim as "the right of a creditor to receive a payment or series of payments from a debtor" (see §5.05 of the ESA 2010) and an economic asset as "a store of value representing the benefits accruing to the economic owner by holding or using the entity over a period of time" (see §7.15). In that, "the economic owner is the institutional unit entitled to claim the benefits associated with the use of the asset by virtue of accepting the associated risks" (see §7.17). Although this doesn't specify how this relates to 'constructive liabilities', it may be expected that the treatment in the ESA 2010 is in line with that in the 2008 SNA, as in principle both manuals are consistent. In line with the 2008 SNA, the ESA 2010 also explicitly excludes contingent assets and liabilities from the central framework. §5.08 explains that "as they do not give rise to unconditional obligations, contingent assets and contingent liabilities are not considered as financial assets and liabilities". The ESA 2010 provides some examples of contingent assets and liabilities in which they also refer to "pension entitlements under unfunded government defined benefit employer pension schemes or social security pension funds"[3] (see §5.09f). It is also explained that an exception is made for standardised guarantee schemes, in line with the 2008 SNA.

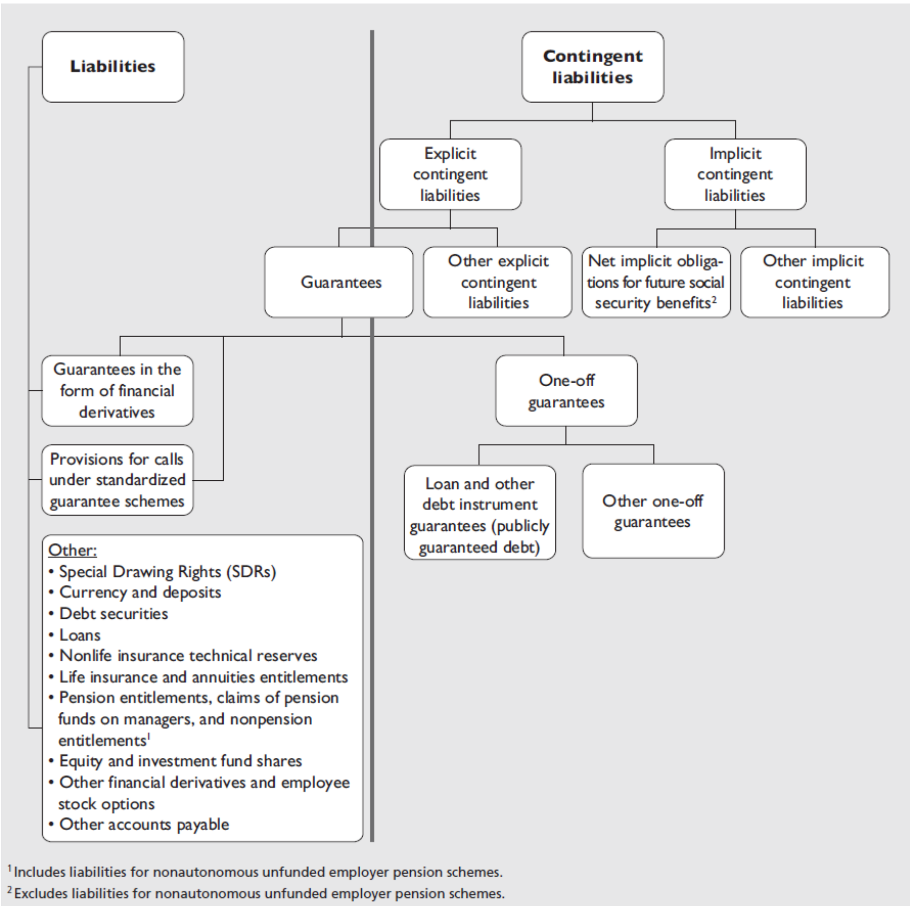
15. The Public Sector Debt Statistics (PSDS) Manual and Government Finance Statistics (GFS) Manual also look at the 'claim' of a creditor on the debtor (see §2.8 of the PSDS and §3.47 of the GFS Manual). Both manuals state that debt liabilities "are typically established through the provision of economic value by one institutional unit, the creditor, to another, the debtor, normally under a contractual arrangement", but that "liabilities can also be created by the force of law, and by events that require future transfer payments" (see §2.8 of the PSDS and §3.45 of the GFS Manual). This implies that the definition is broader than only legal obligations, but it is not specified to what extent other liabilities are recognized. Both manuals also explain what is not recognized as financial assets and liabilities. In this regard, contingent assets and liabilities are not recognized prior to the condition(s) being fulfilled (see §3.11 of the PSDS and §7.13 of the GFS Manual). It is also explained that, in line with the 2008 SNA, "no liability is recognized on the balance sheet for government's implicit obligations to pay social security benefits, such as unemployment, old age pensions, and health care, in the future" (see §7.13 of the GFS Manual). Here, the term 'implicit obligation' is used to refer to these types of liabilities, which is a term that does not appear in the 2008 SNA or the ESA

[3] Please note that the ESA 2010 does not offer the same degree of flexibility with regard to 'intertwined' pension schemes as the 2008 SNA. According to the ESA 2010, the liabilities of all unfunded defined benefit schemes sponsored by the government should only be recorded in the supplementary table (see §17.48 of the ESA 2010). This is not fully consistent with the SNA guidance as this may also include employment-related pension schemes sponsored by government, which according to SNA should be recorded in the central framework of the national accounts.

2010. The PSDS and GFS Manual also contain definitions of 'explicit' and 'implicit' (contingent) liabilities. §4.7 of the PSDS and §7.252 of the GFS Manual explains that explicit contingent liabilities are defined as "legal or contractual financial arrangements that give rise to conditional requirements to make payments of economic value. The requirements become effective if one or more stipulated conditions arise". It is explained that, by contrast, "implicit contingent liabilities do not arise from a legal or contractual source but are recognized after a condition or event is realised". The PSDS Manual further explains that explicit liabilities are "defined by law or contract" whereas implicit liabilities are "moral or expected obligations for the government, based on public expectations or pressures" (see §9.22 of the PSDS Manual). Social security benefits are referred to as an example of implicit liabilities (see §4.21 of the PSDS and §7.261 of the GFS Manual).

16. Both manuals also contain an overview of the different types of liabilities that are distinguished (see Figure 1), indicating which are included in the accounts (presented on the left hand side) and which are excluded (presented on the right hand side). Contingent liabilities are excluded from the accounts, with the exception of standardised guarantees and guarantees in the form of financial derivatives. It also explicitly shows the obligations for future social security benefits as implicit contingent liabilities.

Figure 1: Overview of liabilities and contingent liabilities in GFS and PSDS



Source: Government Finance Statistics Manual 2014

17. The terminology of implicit and explicit liabilities is also used in the so-called 'fiscal risk matrix' as developed by Polackova (1999). She drafted this matrix in response to the increased exposure of governments to off-balance sheet fiscal risks and uncertainties, as in her view "all

sources of fiscal risk must be addressed if governments are to avoid sudden fiscal instability and to realize long-term policy objectives". In the fiscal risk matrix she distinguishes liabilities according to two aspects, i.e. 'direct versus contingent liabilities' and 'explicit versus implicit liabilities'. She explains that "direct liabilities are obligations whose outcome is predictable, while contingent liabilities are obligations that may or may not come due, depending on whether particular events occur. […] Explicit liabilities are specific obligations, created by law or contract, that governments must settle. Implicit liabilities represent moral obligations or burdens that, although not legally binding, are likely to be borne by governments because of public expectations or political pressure" (Polackova, 1999). Figure 2 provides an overview of the fiscal matrix with some examples of the different type of liabilities.

Figure 2: The fiscal risk matrix

Liabilities	Direct (obligation in any event)	Contingent (obligation if a particular event occurs)
Explicit Government liability as recognized by a law or contract	• foreign and domestic sovereign borrowing (loans contracted and securities issued by central government) • budgetary expenditures • budgetary expenditures legally binding in the long term (civil servants' salaries and pensions)	• state guarantees for nonsovereign borrowing and obligations issued to subnational governments and public and private sector entities (development banks) • umbrella state guarantees for various types of loans (mortgage loans, student loans, agriculture loans, small business loans) • trade and exchange rate guarantees issued by the state • state guarantees on private investments • state insurance schemes (deposit insurance, income from private pension funds, crop insurance, flood insurance, war-risk insurance)
Implicit A moral obligation of government that reflects public and interest-group pressures	• future public pensions (as opposed to civil service pensions), if not required by law • social security schemes, if not required by law • future health care financing, if not required by law • future recurrent costs of public investments	• defaults of subnational government or public or private entities on nonguaranteed debt and other obligations • cleanup of liabilities of entities being privatized • banking failure (support beyond state insurance) • failure of a nonguaranteed pension fund, employment fund, or social security fund (protection of small investors) • default of central bank on its obligations (foreign exchange contracts, currency defense, balance of payments stability) • bailouts following a reversal in private capital flows • environmental recovery, disaster relief, military financing

Source: Polackova (1999)

18. The definitions as used by Polackova are broadly in line with those in the PSDS and the GFS Manual, but where the latter two only recognize *contingent* implicit liabilities, Polackova also recognizes *direct* implicit liabilities. She explains that these are often "a presumed, longer-term consequence of public expenditure" as a consequence of which she classifies future pensions in countries with pay-as-you-go pension schemes in this specific category. In this, she differs from the PSDS and the GFS Manual, which classify them as contingent implicit liabilities.

19. As the difference between direct and contingent liabilities is an important one, particularly as contingent liabilities (with the exception of standardized guarantees) are explicitly excluded from the accounts in the various statistical manuals, it is relevant to assess what the correct classification should be of implicit liabilities such as social security pension liabilities. For that purpose, it is important to focus on their distinguishing characteristic(s). In that regard, the fact that they derive from a moral obligation and are thus not enforceable by law (i.e. the government may decide to change or even cancel the scheme) is already reflected by their classification as 'implicit liability'. Therefore, the question remains whether this implicit obligation is an 'obligation in any event' or only becomes an 'obligation if a particular event occurs'. In that respect, it would make sense to treat them in line with liabilities derived from other types of pension schemes, i.e. recording their liabilities (and entitlements) in the accounts on the basis of actuarial calculations, even though individual entitlements may include an aspect of contingency depending on persons reaching a

certain age[4]. This means that social security pension entitlements should be regarded as *direct* implicit liabilities. Moreover, when looking at the fiscal risk matrix, social security pension liabilities also significantly differ from contingent implicit liabilities such as covering the obligations of subnational governments in the event of defaults or ensuring solvency of the banking sector. For these types of implicit liabilities it indeed makes sense to only record them as direct liabilities when the obligating event has occurred.

20. In assessing how to properly define 'constructive liabilities', it is also interesting to look at international accounting standards. In that regard, possible guidance may be derived from the Conceptual Framework for General Purpose Financial Reporting by Public Sector Entities (referred to as "the Framework") that has been developed by the IPSAS Board. This Framework that specifically aims at public sector reporting contains definitions that provide more clarity on how 'constructive liabilities' may be interpreted. §5.17 of the Framework states that "for financial reporting purposes it is necessary to determine whether […] commitments and obligations, including binding obligations that the entity has little or no realistic alternative to avoid but are not legally enforceable (non-legally binding obligations) are present obligations and satisfy the definition of a liability". These non-legally binding obligations seem similar to 'constructive obligations' as mentioned in the SNA. In that regard, one has to look at the degree to which an entity can realistically avoid a non-legally binding obligation and whether it satisfies the definition of a liability. The paragraph further specifies that these obligations have the following attributes:

- "The entity has indicated to other parties by an established pattern of past practice, published policies, or a sufficiently specific current statement that it will accept certain responsibilities;
- As a result of such an indication, the entity has created a valid expectation on the part of those other parties that it will discharge those responsibilities; and
- The entity has little or no realistic alternative to avoid settling the obligation arising from those responsibilities." (International Public Sector Accounting Standards Board, 2014)

21. Thus, whenever an entity has no realistic alternative to avoid settling an obligation arising from past practice, published policies, or a sufficiently specific current statement, this will lead to a non-legally obligation according to the Framework. As this may still be liable to interpretation, §5.25 of the Framework provides further guidance on the exact interpretation of "no realistic alternative to avoid an outflow of resource". It mentions that factors that are relevant in this respect are "the nature of the past event or events that give rise to the obligation [and] the ability of the entity to modify or change the obligation before it crystallizes". It also mentions a possible correlation between the availability of funding and the creation of a present obligation, but at the same time explains that "the absence of a budgetary provision does not itself mean that a present obligation has not arisen". In addition to the guidance in this Framework, the IPSAS Board also released a consultation paper in 2015 on the 'Recognition and measurement of social benefits' that contains possible methods to determine what past events may give rise to a present obligation and when entities have little or no realistic alternative to avoid settling this obligation. These considerations may also be very relevant in further specifying criteria to define 'constructive liabilities'.

[4] In this respect, there is also similarity with standardized guarantees for which each individual arrangement involves a contingent liability, but for which "the number of similar guarantees is such that an actual liability is established for the proportion of guarantees likely to be called" (see §3.40 of the 2008 SNA).

22. The discussion regarding the ‘obligating event’ giving rise to the obligation as discussed above, is also very relevant with regard to possible recognition of these types of liabilities in the central framework of the SNA. In that regard, it has to be borne in mind that the SNA applies accrual accounting, which means that flows and stocks are recorded when claims and obligations arise (or when the economic value is created), are transformed or are cancelled (see §2.55 of the 2008 SNA). Thus, whereas individuals may have a valid expectation of payment with regard to various social security schemes, it will only lead to a ‘constructive liability’ after the relevant ‘obligating event’ has taken place. For social security pension schemes this ‘obligating event’ may be the payment of social contributions or the residency in a country in a certain time period. For other types of social security schemes it will depend on their specific ‘obligating event’ whether events in the current recording period give rise to a valid expectation of any benefits in the future that will lead to the accrual of a ‘constructive liability’.

23. In conclusion, although the term ‘constructive liabilities’ is not used in other statistical manuals, the term ‘implicit contingent liabilities’ as used in the PSDS and the GFS Manual seems to cover the same types of liabilities (although ‘direct implicit liabilities’ seems to be a more suitable term). However, whereas the 2008 SNA includes ‘constructive liabilities’ in the asset boundary, ‘implicit contingent liabilities’ are explicitly excluded from the GFS and PSDS frameworks. Thus, in case it is concluded that these indeed refer to the same types of liabilities, agreement needs to be reached on whether to include or exclude them from the accounts. This is discussed in the next section. Furthermore, there is a need to better define these types of liabilities in the statistical manuals to properly specify what it covers, specifically focusing on defining the ‘obligating event’ that creates the direct implicit liability. The definition of direct implicit liabilities as used by Polackova and the guidance included in international accounting standards for recognizing non-legally binding obligations provide relevant input for this purpose.

5. Reasons for including or excluding ‘constructive liabilities’

24. As the 2008 SNA on the one hand and the PSDS and the GFS Manual on the other hand seem to have different views on the treatment of ‘liabilities that derive from a long and well-recognized custom that is not easily refuted’, it is interesting to look at the main reasons in favour of their inclusion or their exclusion.

25. To start with the main reason for not including these type of liabilities in the central framework of the national accounts, implicit liabilities are not contractual obligations, so are not enforceable and in that sense do not meet the ‘ownership’ criterion of the SNA. Although persons may have a valid expectation to receive benefits on the basis of past or current policies and regulations, the policies may be altered without people having any legal instruments to enforce their ‘claims’. A second reason that is often mentioned in favour of not including these types of liabilities is that it would concern ‘contingent’ liabilities. However, as explained in Section 4, the contingency of these liabilities is not in whether the expectations of people to receive benefits in the future turn out to be valid (this is already reflected in the fact that these liabilities are regarded as implicit), but in whether they will meet the future requirements (not to be confused with ‘obligating event’) to receive the benefits. In that regard, the contingency seems no different than for other types of pension benefits for which entitlements and liabilities are recognized in the central framework. For

that reason, it would not make sense to apply a different approach for social security pension schemes.

26. The main reason for including these types of liabilities in the central framework of the national accounts is that they reflect an economic value that has been created over time. People that have made contributions to social security pension schemes indeed expect to receive a pension benefit in the future and usually take this into account when making decisions with regard to their retirement. It also has to be borne in mind that any changes in government policy with regard to social security pension schemes will have a direct impact on how households regard their (future) financial situation which may immediately be reflected in their consumption and savings behaviour. In that regard, the implicit nature of the entitlements should not be used as an argument for not including the entitlements in the accounts, but as an argument to try to properly reflect the actual or 'market' value of these entitlements, as well as to show any changes in this value over time.

27. Also from a liability perspective there are arguments in favour of showing the relevant amounts. First of all, it would reflect the 'gap' created by setting up the pension scheme as a pay-as-you-go system. Presenting the accrued liabilities in the accounts would provide insight in how this decision leads to different results from setting it up as a (partially) funded scheme. It would also lead to more comparability of pension results across countries, bearing in mind that in some countries the entitlements of employment-related pension schemes sponsored by the government may have the same (legal) status as social security pension entitlements. Finally, including these liabilities in the central framework would also provide more insight in the impact of demographic changes on the sustainability of these schemes and in who is bearing the costs of maintaining its sustainability. Of course, for sustainability analysis more information would be needed on future contributions and benefits that have not yet been accrued, but the accrued-to-date implicit liabilities would provide the starting point.

28. In assessing pros and cons of including these types of liabilities in the asset boundary, it is also interesting to note that, as explained in Section 4, international accounting standards recognizes them as liabilities to be included in the accounts. It will depend on the 'obligating event' when the liability has to be recognized, but "whenever an entity has no realistic alternative to avoid settling an obligation arising from past practice, published policies, or a sufficiently specific current statement" these will have to be regarded as liability according to the accounting standards.

29. In case it would be decided to include direct implicit liabilities in the national accounts, it has to be borne in mind that these types of liabilities have a different status than explicit liabilities, as a consequence of which it would be relevant to clearly distinguish them. With regard to social security pension entitlements this means that these should not be combined with employment-related pension liabilities in the category 'pension entitlements', but be presented in a separate (sub)category. The same principle should be applied to other types of direct implicit liabilities in case these would meet the criteria to be included in the national accounts. In case it is decided not to include these types of liabilities in the asset boundary, it would still be relevant to explore the possibilities to present these liabilities as supplementary information, for example via a satellite account or in the form of a supplementary table such as the one that has been developed for social insurance pension schemes, as it is expected to provide relevant information for users.

6. The impact of including ‘constructive liabilities in the SNA’ – The example of social security pensions

30. If it would be decided to include ‘constructive liabilities’ in the national accounts, this will of course affect the financial accounts and balance sheets. However, it will also have an impact on the non-financial accounts. The exact way how the latter will be affected, depends on how the various changes in the assets (and corresponding liabilities) would be accounted for. Some of the relevant flows may already be recorded in the national accounts, but additional flows may be needed to account for all changes. This section provides an example of how the recognition of social security pension entitlements and liabilities in the SNA would affect the various accounts[5]. As social security pension schemes can be regarded as a form of defined benefit scheme (i.e. the benefits are determined by the use of a formula), §17.151 to §17.161 of the 2008 SNA describing the relevant flows for a defined benefit scheme are taken as starting point[6].

31. First of all, the recognition of social security pension entitlements and liabilities in the system of national accounts would lead to their recording in the balance sheets of the relevant sectors. Assets will appear in the household sector (please note that a small amount may also appear in the column showing positions vis-à-vis the rest-of-the-world reflecting entitlements of non-resident households towards domestic social security schemes[7]), whereas liabilities will show up in the government sector (and again a small amount may appear in the rest-of-the-world column reflecting entitlements of resident households with regard to non-resident social security schemes). Within the government sector the liabilities are most likely to be recorded under the subsector ‘social security funds’ as administrator of the scheme. In case the responsibility for any shortfall or surplus in the scheme is borne by the central government (i.e. the central government is the ‘sponsor’ of the scheme), this will also create a claim of the social security fund on the central government, as described in §17.165 of the 2008 SNA, reflecting the over- or underfunding of the scheme (in a pay-as-you-go scheme this will be equal to the implicit pension liabilities of the social security fund).

32. Secondly, the changes in the assets and liabilities will have to be accounted for, possibly affecting various accounts depending on the underlying change. Looking at defined benefit pension schemes, there are four factors that may lead to a change in the entitlements (see §17.145 of the 2008 SNA). The first factor is the ‘current service increase’, related to the increase in entitlements associated with the wages and salaries earned in the current period[8]. The second factor is the ‘past service increase’, related to the unwinding of the discount rate, reflecting that the date when the entitlements become payable has become one year nearer[9]. The third source of change relates to the payment of pension benefits to retirees of the scheme. Finally, the fourth source relates to other changes, which will be reflected in the revaluation and other changes in assets accounts.

[5] Annex 1 provides some examples of how the recognition of social security pension entitlements and liabilities would affect the accounts.

[6] Please note that for simplicity reasons this example disregards the impact of costs of operating the scheme.

[7] For simplicity reasons, positions and flows with regard to the rest-of-the-world will not explicitly be referred to in the remainder of this section and in the example in Annex 1.

[8] For employment-related schemes this is reflected in employers’ actual and imputed pension contributions.

[9] This is reflected in the investment income payable on pension entitlements which is recorded as being distributed to the policy holders and then reinvested by them via households’ pension contribution supplements.

33. For social security pension schemes, the sources of change will broadly be the same as for employment-related defined benefit schemes. The entitlements will increase as a result of new entitlements being created by 'obligating events' occurring during the recording period (this will be referred to as 'current period increase'), the value of existing entitlements may change due the unwinding of the discount rate (referred to as 'past period increase'), the entitlements will be reduced as a result of pension benefits in the recording period, and, finally, the entitlements may change due to other changes, such as changes in the actuarial assumptions or in the benefit formula.

34. When looking at the first source of change, the national accounts currently only record actual social security pension contributions as paid by households (or indirectly by employers). However, as these need not necessarily be equal to the 'current period increase' for social security pension entitlements, this creates the need for an imputed flow between households and social security funds to correct for any shortfall (or surplus) in the accrual of new entitlements. These 'imputed social security pension contributions' are equal to the gap between the current period increase and the actual contributions. These imputed flows may be either positive or negative. Positive cases will appear when the actual contributions fall short of the accrual of new entitlements in the recording period. Negative cases arise when the actual contributions exceed the actuarially required level to finance future benefits accrued in the recording period. The latter may definitely be expected to happen at the individual level, also reflecting redistribution in the accrual of social security pension entitlements. This means that some households may accrue an entitlement without making any actual contributions, their entitlement being (partly) financed by households for which the contributions exceed their current period increase. Then, as the government bears responsibility for the social security pension scheme (i.e. is the sponsor of the scheme), a second imputation is required to show that these additional contributions are actually paid for by the government as sponsor of the scheme. This leads to a 'compensation for imputed social contributions' paid by the government to households, equal to the 'imputed social security pension contributions'. Whereas the corresponding flow for employment-related schemes appears in the primary income account, reflecting that this additional flow is part of compensation of employees as paid by the employer as sponsor of the scheme, it makes more sense to record it in the secondary distribution of income account with regard to social security schemes. Most of these schemes will be set up in such a way that contributions will be sufficient to pay for the benefits and in case of any shortfall the government is likely to finance this gap on the basis of general funds, implying a form of redistribution. Furthermore, recording these flows in the secondary distribution of income account would also reflect the fact that redistribution takes place in the accrual of social security pension entitlements, as was explained above.

35. The second source of change, i.e. the 'past period increase', is currently not reflected in the national accounts for social security pensions, as their entitlements are not recognized in the accounts. That means that if these entitlements are going to be included, the impact of the unwinding of the discount factor on these entitlements will require an additional flow to reflect this part of the accrual. In line with the recording for employment-related schemes this would lead to a flow from the pension administrator (as investor of the underlying funds from which it receives income to pay for the past service increase) to households recorded as 'investment income payable on pension entitlements' in the primary income account. The same amount is then recorded as being paid by households as 'social contribution supplements' into the social security pension scheme in the secondary distribution of income account. In case of any shortfall (or surplus) in

investment income in relation to the past period increase, which is likely to occur for social security schemes in case they are set up as pay-as-you-go systems, this would also create an additional flow between the government and the social security fund to compensate for this gap, reflecting the role of the government as sponsor of the scheme[10]. This would be recorded as 'imputed investment income attributable to the surplus/shortfall in social security pension funds' and would, just as the 'investment income payable on pension entitlements', be recorded in the primary income account.

36. Under the assumption that most social security schemes will be setup as pay-as-you-go schemes in which there will be no funds underlying the entitlements, and in which consequently there will be no investment income to fund the 'past period increase', an alternative would be to directly record the flow from the sponsor of the scheme to the relevant households, instead of via the administrator. Instead of being reflected as 'investment income' to be recorded in the primary income account, it would then make more sense to regard this as a form of 'redistribution' to be recorded in the secondary distribution of income account, under the assumption that the government will in the end fund any shortfall on the basis of actual current social security pension contributions or from general funds (or add any surplus to general funds). In that regard, it may also be argued that the actual social security pension contributions should (over the long run) cover both the current and past period increase (as otherwise the scheme would not be balanced) and that for that purpose there would only be a need for one imputed flow ('imputation for gap in the accrual of social security pension entitlements'), equal to the gap between the actual contributions and the sum of both the current and past period increase. This would give the same results as the alternative approach, but without providing a breakdown of the imputed flow in a part relating to the past period increase and a part relating to the current period increase.

37. The third source of change, i.e. the payment and receipt of pension benefits, is already covered in the national accounts. There is no need for a change in this recording when social security pension entitlements (and liabilities) are included in the central framework. A new entry will, however, be needed in the use of income account to reflect any increase (or decrease) in pension entitlements caused by the excess of contributions payable less benefits receivable. This adjustment for the change in pension entitlements is needed to reflect that pension contributions and benefits are both recorded as part of income (i.e. household disposable income will be affected by contributions paid and benefits received) and as part of saving (i.e. contributions are treated as saving whereas benefits are treated as dissaving from the point of view of the household sector) (see §9.20 to §9.25 of the 2008 SNA). Up until now this adjustment was not needed as social security contributions and benefits were not treated as affecting household wealth (and as a consequence were not regarded as (dis)savings), but this will be the case once social security pension entitlements and liabilities are recognized in the central framework of the national accounts.

38. Finally, entitlements may change due to other factors. The balance sheet totals may for example change as a consequence of changes in scheme structure as agreed in parliament. As explained in Chapter 17 of the SNA these should be recorded as transactions, i.e. as a capital transfer on the one hand and as a financial transaction on the other hand. Any changes to the key model assumptions in the actuarial calculations to estimate the future social security benefits should be reflected in the revaluations account. These may for example concern the discount rate or the price escalation clause. Conversely, changes related to alterations in demographic assumptions should be

[10] See Intersecretariat Working Group on National Accounts (2018) for more information.

recorded as “other changes in volume of assets” (see for more information §17.177 to §17.179 of the 2008 SNA).

39. The various changes will also have an impact on balancing items. One of the most important items in this respect is saving. This may be affected for both the government and the household sector as a result of the inclusion of the imputed items and of the ‘adjustment for the change in pension entitlements’. The first case which will lead to a different savings’ result in comparison with the current recording in the SNA is when there is a difference between the actual social security pension contributions and benefits in a specific period. Whereas in the current situation this will only be reflected in the income accounts, in the new situation it will also be reflected in the adjustment for the change in pension entitlements, showing the impact of this gap on (dis)savings for both sectors. For example, any excess of social security pension contributions over benefits would in the new situation not only be reflected in a lower disposable income for the household sector, but also in higher household savings via the adjustment for the change in pension entitlements, increasing the social security pension entitlements of the household sector. The second situation is when there is a difference between the actual social security pension contributions and the increase in entitlements due to the current period increase. This would lead to imputed flows between the government and the household sector (which would cancel out in the redistribution of income accounts), and affect savings via the adjustment for the change in pension entitlements. In case actual contributions fall short of the accrual, this will positively affect household savings (and negatively affect savings for the government sector), whereas any excess of actual contributions would lead to the opposite situation. Another important balancing item that will be affected is net wealth. The recognition of social security pension entitlements and liabilities in the accounts will lead to an increase in net wealth for the household sector, whereas it will show a decrease for the government sector. The latter will reflect the increase in the level of government debt as a result of the recognition of these implicit liabilities. As these all concern important macroeconomic indicators, it will be important to properly explain the consequences of a possible recognition of implicit liabilities to users and to assist them in correctly interpreting the ‘new’ results.

7. Conclusions

40. The discussion on the recognition of pension entitlements in the national accounts made clear that the asset boundary as currently defined in the SNA leaves room for interpretation, mainly relating to the part that refers to ‘constructive liabilities’. For that reason, there is a need to better specify and delineate what is meant by these types of liabilities and to assess whether or not these should be included in the asset boundary. The latter is particularly relevant as statistical manuals currently seem to apply a different approach with regard to these types of liabilities. Furthermore, the treatment of social security pension entitlements in the 2008 SNA currently seems to be in contradiction with this part of the asset boundary.

41. In trying to better define and delineate ‘constructive liabilities’ the paper showed that even though the term does not appear in other statistical manuals, it seems to match ‘implicit contingent liabilities’ as defined in the PSDS and GFS Manual (although these two Manuals explicitly exclude these types of liabilities from the accounts). Furthermore, it seems to match ‘direct implicit liabilities’ as used in the fiscal risk matrix by Polackova, which seems a more appropriate term as it

concerns liabilities ‘that are established by long and well-recognized custom that is not easily refuted’ (the implicit part) and that constitute obligations which are not contingent on a specific event to happen (the direct part). The definitions and guidance as used by Polackova may also provide useful input to better define and delineate these types of liabilities in statistical manuals, also in relation to other types of liabilities. This should assist compilers and users to better distinguish between various types of liabilities and to better understand which to include in the accounts. Guidance from international accounting standards may also be used for this purpose, particularly in defining the ‘obligating event’ that gives rise to the direct implicit liability. The latter is important in assessing how a possible inclusion of these types of liabilities in the asset boundary would affect the recognition of liabilities of specific types of social security schemes in the accounts.

42. With regard to the question whether direct implicit liabilities should be included in the asset boundary, the paper listed some pros and cons. On the one hand, these liabilities do not meet the ‘ownership’ criterion as mentioned in the asset boundary, but on the other hand they do represent an economic value and it is expected that their inclusion in the accounts would definitely benefit economic analyses. In that regard, even if it would be decided not to include them in the central framework of the national accounts, it is recommended to provide information on these liabilities as supplementary data. Regardless of the decision, the paper clearly showed the need for modifications in statistical manuals to better define these types of liabilities and to better align the treatment of these types of liabilities in the accounts. This will be necessary to avoid any misinterpretations of the guidelines and to ensure a consistent treatment of different types of liabilities across countries and statistical domains.

References

Eurostat, European Commission (2013), *European System of Accounts ESA 2010*, Brussels-Luxembourg.
http://ec.europa.eu/eurostat/documents/3859598/5925693/KS-02-13-269-EN.PDF/44cd9d01-bc64-40e5-bd40-d17df0c69334?version=1.0

Eurostat, IMF, OECD, UN, World Bank (2009), *System of National Accounts 2008,* New York.
http://unstats.un.org/unsd/nationalaccount/docs/SNA2008.pdf

International Monetary Fund (2013), *Public Sector Debt Statistics, Guide for Compilers and Users,* Washington DC.
http://www.tffs.org/pdf/method/2013/psds2013.pdf

International Monetary Fund (2014), *Government Finance Statistics Manual 2014,* Washington DC.
https://www.imf.org/external/Pubs/FT/GFS/Manual/2014/gfsfinal.pdf

International Public Sector Accounting Standards Board (2008), *IPSAS 25 – Employee benefits*, London.
https://www.ifac.org/system/files/publications/files/ipsas-25-employee.pdf

International Public Sector Accounting Standards Board (2014), *Conceptual Framework for General Purpose Financial Reporting by Public Sector Entities*, London.
https://www.ifac.org/publications-resources/conceptual-framework-general-purpose-financial-reporting-public-sector-enti-8

International Public Sector Accounting Standards Board (2015), *Consultation paper on Recognition and Measurement of Social Benefits*, London.
https://www.ifac.org/system/files/publications/files/IPSASB-Consultation-Paper-Social-Benefits_0.pdf

Intersecretariat Working Group on National Accounts (2018), “Recording of flows between a defined benefit pension fund and its sponsor”, in SNA News and Notes, Number 39/40, April 2018, p4-7.
https://unstats.un.org/unsd/nationalaccount/sna/nn39-en.pdf

Polackova, H. (1999), “Contingent government liabilities – A hidden fiscal risk”, Finance & Development, March 1999, Volume 36, Number 1.
https://www.imf.org/external/pubs/ft/fandd/1999/03/pdf/polackov.pdf

Zwijnenburg, J. (2016), “Recording of pension entitlements”, OECD, 10th Meeting of the Advisory Expert Group on National Accounts.
https://unstats.un.org/unsd/nationalaccount/aeg/2016/7_1_Pension_Entitlements.pdf

Annex 1: Example of impact of recognition of social security pension liabilities and entitlements

To have a better understanding of how the inclusion of direct implicit liabilities may affect the national accounts, this annex provides an example of how the recognition of social security pension liabilities (and entitlements) in the central framework of the national accounts would change the accounts of the relevant sectors. This is done on the basis of the description as provided in Section 6 of the paper, applying the alternative approach to deal with the past service increase (i.e. combining it with the current period increase in assessing any gap between the actual contributions and the accrual of entitlements in the recording period, giving rise to only one imputed flow for any gap). It starts with presenting the situation of a perfectly balanced social security scheme in which contributions both match the benefits and the accrual of the entitlements. Subsequently, examples will be presented for situations in which there is a) a gap between the actual contributions and the benefits; b) a gap between the actual contributions and the sum of the current and past period increase; c) an increase in entitlements due to an increase in life expectancy; and d) an adjustment in the entitlements as a result of a negotiated change in parliament. Please note that in these examples it is assumed that the social security scheme only involves the government sector (reflecting both the transactions of the general government as sponsor of the scheme and the social security fund as administrator of the scheme, consolidating any flows between the two) and the household sector (i.e. no relations with the rest-of the-world are presented). Furthermore, the example disregards any costs of operating the scheme.

Initial situation

The basic scenario is a perfectly balanced social security pension scheme in which contributions match both the benefits and the accrual of the entitlements due to current and past period increase. The accrued social security pension entitlements at the start of the recording period are 1200. The actual social contributions (directly paid by households) and pension benefits are both 100. The accrual of social security entitlements in the recording period also amounts to 100, consisting of a 'current period increase' of 70 and a 'past period increase' of 30. Table 1a shows how this would be recorded in the national accounts according to 2008 SNA. Table 1b shows the recording in case of recognition of social security pension entitlements and liabilities in the central framework, highlighting the differences with the current recording in yellow.

Table 1a: Example of balanced social security pension scheme – According to 2008 SNA

	General government	Households	Total economy	General government	Households	Total economy
	Uses			Resources		
Secondary distribution of income account						
Household actual social security pension contributions		100	100	100		100
Pension benefits	100		100		100	100
Use of income account						
Saving	0	0	0			

Table 1b: Example of balanced social security pension scheme – According to inclusion of social security pension entitlements and liabilities

	General government	Households	Total economy	General government	Households	Total economy
	Uses			Resources		
Secondary distribution of income account						
Household total social security pension contributions		100	100	100		100
Household actual social security pension contributions		100	100	100		100
Household social security pension contribution supplements		-	-	-		-
Pension benefits	100		100		100	100
Imputation for gap in accrual of social security pension entitlements	-		-		-	-
Use of income account						
Adjustment for the change in pension entitlements	0		0		0	0
Saving	0	0	0			
	Assets			Liabilities		
Opening balance sheet						
Social security pension entitlements		1200	1200	1200		1200
Net wealth				-1200	1200	0
Financial accounts						
Net lending/borrowing				0	0	0
Social security pension entitlements		0	0	0		0
Other changes in the volume of assets account						
Social security pension entitlements		0	0	0		0
Revaluations						
Social security pension entitlements		0	0	0		0
Closing balance sheet						
Social security pension entitlements		1200	1200	1200		1200
Net wealth				-1200	1200	0

Except for the inclusion of social security pension entitlements and liabilities in the balance sheets of the government and the household sector, nothing changes compared to the current recording. This is due to the fact that in this initial situation the scheme is perfectly balanced, creating no need for imputed flows for any gaps between the actual contributions and the accrual of entitlements in the recording period or for an adjustment for the change in pension entitlements. In the following examples, changes are introduced that show how any imbalances will affect the accounts.

a) A gap between the actual contributions and the benefits

Let's assume a situation in which the actual social contributions fall short of the pension benefits, i.e. the contributions amount to 80 whereas the benefits are still 100. The contributions, however, are still sufficient to match the accrual of entitlements due to current and past period increase. Table 2a shows how this would be recorded in the national accounts according to 2008 SNA. Table 2b shows the recording in case of recognition of social security pension entitlements and liabilities in the central framework, highlighting the differences with the current recording in yellow.

Table 2a: Example of impact of gap between actual contributions and pension benefits – According to 2008 SNA

	General government	Households	Total economy	General government	Households	Total economy
	Uses			Resources		
Secondary distribution of income account						
Household actual social security pension contributions		80	80	80		80
Pension benefits	100		100		100	100
Use of income account						
Saving	-20	20	0			
Financial accounts						
Net lending/borrowing				-20	20	0
Other financial instruments	-20	+20	0			0

Table 2b: Example of impact of gap between actual contributions and pension benefits – According to inclusion of social security pension entitlements and liabilities

	General government	Households	Total economy	General government	Households	Total economy
	Uses			Resources		
Secondary distribution of income account						
Household total social security pension contributions		80	80	80		80
Household actual social security pension contributions		80	80	80		80
Household social security pension contribution supplements		-	-	-		-
Pension benefits	100		100		100	100
Imputation for gap in accrual of social security pension entitlements	-		-		-	-
Use of income account						
Adjustment for the change in pension entitlements	-20		-20		-20	-20
Saving	0	0	0			
	Assets			Liabilities		
Opening balance sheet						
Social security pension entitlements		1200	1200	1200		1200
Net wealth				-1200	1200	0
Financial accounts						
Net lending/borrowing				0	0	0
Other financial instruments	-20	+20	0			0
Social security pension entitlements		-20	-20	-20		-20
Other changes in the volume of assets account						
Social security pension entitlements		0	0	0		0
Revaluations						
Social security pension entitlements		0	0	0		0
Closing balance sheet						
Social security pension entitlements		1180	1180	1180		1180
Net wealth				-1180	1180	0

In the current SNA, this situation would lead to negative savings for the government sector and positive for households (under the assumption that the excess (shortfall) of funds is directly reflected in an increase (decrease) of another financial instrument (in the table this is only presented in the financial accounts for information)). As a result of the recognition of social security pension entitlements in the accounts, this excess of benefits over contributions would be regarded as dissaving by the household sector, reflected in the adjustment for the change in pension entitlements, and lead to zero savings for both sectors. Furthermore, the dissaving would be reflected in a lower value of social security pension entitlements at the end of the recording period.

b) A gap between the actual contributions and the increase in entitlements as a result of the current and past period increase

Let's now assume the situation in which the actual social contributions are equal to the benefits, but fall short of the accrual of entitlements due to current and past period increase which in this example is set to 130. Table 3a shows how this would be recorded in the national accounts according to 2008 SNA. Table 3b shows the recording in case of recognition of social security pension entitlements and liabilities in the central framework, highlighting the differences with the current recording in yellow.

Table 3a: Example of impact of gap between actual contributions and increase in entitlements as a result of current and past period increase – According to 2008 SNA

	General government	Households	Total economy	General government	Households	Total economy
	Uses			Resources		
Secondary distribution of income account						
Household actual social security pension contributions		100	100	100		100
Pension benefits	100		100		100	100
Use of income account						
Saving	0	0	0			

Table 3b: Example of impact of gap between actual contributions and increase in entitlements as a result of current and past period increase – According to inclusion of social security pension entitlements and liabilities

	General government	Households	Total economy	General government	Households	Total economy
	Uses			Resources		
Secondary distribution of income account						
Household total social security pension contributions		130	130	130		130
Household actual social security pension contributions		100	100	100		100
Household social security pension contribution supplements		30	30	30		30
Pension benefits	100		100		100	100
Imputation for gap in accrual of social security pension entitlements	30		30		30	30
Use of income account						
Adjustment for the change in pension entitlements	30		30		30	30
Saving	-30	30	0			

	Assets			Liabilities		
Opening balance sheet						
Social security pension entitlements		1200	1200	1200		1200
Net wealth				-1200	1200	0
Financial accounts						
Net lending/borrowing				-30	30	0
Social security pension entitlements		30	30	30		30
Other changes in the volume of assets account						
Social security pension entitlements		0	0	0		0
Revaluations						
Social security pension entitlements		0	0	0		0
Closing balance sheet						
Social security pension entitlements		1230	1230	1230		1230
Net wealth				-1230	1230	0

In the current SNA, this situation would not lead to any additional flows compared to the initial situation. However, when including social security pension entitlements and liabilities in the accounts, imputations would be needed for the fact that the accrual of entitlements in the recording period exceeds the actual social contributions. This will lead to an imputed flow from the government sector to households which will be reflected in a higher contribution by households to the social security scheme (i.e. cancelling out at the level of disposable income for both sectors) also reflected in a positive adjustment in the change in their pension entitlements. The latter will lead to negative savings for the government sector and positive savings for the household sector, also affecting the value of social security pension entitlements at the end of the recording period.

c) An increase in entitlements due to an increase in life expectancy

Let's now assume that an increase in life expectancy has increased the value of the entitlements and liabilities to 1250. Table 4a shows how this would be recorded in the national accounts according to 2008 SNA. Table 4b shows the recording in case of recognition of social security pension entitlements and liabilities in the central framework, highlighting the differences with the current recording in yellow.

Table 4a: Example of impact of an increase in entitlements due to an increase in life expectancy – According to 2008 SNA

	General government	Households	Total economy	General government	Households	Total economy
	Uses			Resources		
Secondary distribution of income account						
Household actual social security pension contributions		100	100	100		100
Pension benefits	100		100		100	100
Use of income account						
Saving	0	0	0			

Table 4b: Example of impact of an increase in entitlements due to an increase in life expectancy – According to inclusion of social security pension entitlements and liabilities

	General government	Households	Total economy	General government	Households	Total economy
	Uses			Resources		
Secondary distribution of income account						
Household total social security pension contributions		100	100	100		100
Household actual social security pension contributions		100	100	100		100
Household social security pension contribution supplements		-	-	-		-
Pension benefits	100		100		100	100
Imputation for gap in accrual of social security pension entitlements	-		-		-	-
Use of income account						
Adjustment for the change in pension entitlements	0		0		0	0
Saving	0	0	0			
	Assets			Liabilities		
Opening balance sheet						
Social security pension entitlements		1200	1200	1200		1200
Net wealth				-1200	1200	0
Financial accounts						
Net lending/borrowing				0	0	0
Social security pension entitlements		0	0	0		0
Other changes in the volume of assets account						
Social security pension entitlements		50	50	50		50
Changes in net wealth due to other changes in volume of assets				-50	50	0
Revaluations						
Social security pension entitlements		0	0	0		0
Closing balance sheet						
Social security pension entitlements		1250	1250	1250		1250
Net wealth				-1250	1250	0

Whereas the increase in entitlements due to the increase in life expectancy would not lead to any additional recordings under the current SNA guidance, it would create new entrances when the social security pension entitlements would be recognized in the national accounts. The impact would be reflected in the other changes in the volume of assets account and in a higher value of the entitlements and liabilities at the end of the recording period.

d) An adjustment in the entitlements as a result of a negotiated change in parliament

Let's now assume that in response to the increased life expectancy in situation c) the government agrees in parliament to decrease the pension benefits. Table 5a shows how this would be recorded in the national accounts according to 2008 SNA. Table 5b shows the recording in case of recognition of social security pension entitlements and liabilities in the central framework, highlighting the differences with the current recording in yellow.

Table 5a: Example of impact of an adjustment in the entitlements as a result of a negotiated change in parliament – According to 2008 SNA

	General government	Households	Total economy	General government	Households	Total economy
	Uses			Resources		
Secondary distribution of income account						
Household actual social security pension contributions		100	100	100		100
Pension benefits	100		100		100	100
Use of income account						
Saving	0	0	0			

Table 5b: Example of impact of an adjustment in the entitlements as a result of a negotiated change in parliament – According to inclusion of social security pension entitlements and liabilities

	General government	Households	Total economy	General government	Households	Total economy
	Uses			Resources		
Secondary distribution of income account						
Household total social security pension contributions		100	100	100		100
Household actual social security pension contributions		100	100	100		100
Household social security pension contribution supplements		-	-	-		-
Pension benefits	100		100		100	100
Imputation for gap in accrual of social security pension entitlements	-		-		-	-
Use of income account						
Adjustment for the change in pension entitlements	0		0		0	0
Saving	0	0	0			
	Assets			Liabilities		
Capital accounts						
Capital transfers, receivable				50		50
Capital transfers, payable					-50	-50
Net lending/borrowing	50	-50	0			
Opening balance sheet						
Social security pension entitlements		1250	1250	1250		1250
Net wealth				-1250	1250	0
Financial accounts						
Net lending/borrowing				50	-50	0
Social security pension entitlements		-50	-50	-50		-50
Other changes in the volume of assets account						
Social security pension entitlements		0	0	0		0
Revaluations						
Social security pension entitlements		0	0	0		0
Closing balance sheet						
Social security pension entitlements		1200	1200	1200		1200
Net wealth				-1200	1200	0

Whereas the decrease in pension benefits would not lead to any recordings under the current SNA guidance, the negotiated change would show up when the social security pension entitlements would be recognized in the national accounts. The impact would be reflected as transactions, showing a capital transfers from households to the government sector with a corresponding entry in the financial accounts, leading to a lower value of the social security pension entitlements and liabilities at the end of the recording period.