

United States comments on volume 1 of updated SNA

Bureau of Economic Analysis

April 30, 2008

We greatly appreciate the efforts of the editor, project managers, and Inter-Secretariat Working Group on National Accounts (ISWGNA) in drafting and checking the updated text of volume 1. In general, the updated text accurately reflects the recommendations that were made by the Advisory Expert Group (AEG) and approved by the UN Statistical Commission in 2007. In many cases we note that the clarity has also been improved. We continue to think that volume 1 of the updated SNA will provide a greatly improved set of guidelines for compiling national accounts and we continue to give strong support to the SNA update.

In a few cases, however, our review found discrepancies between the AEG recommendations and the draft text. We begin by expressing our opinion on the preferred title for the volume. Next, our major comments focus on the consistency of the revised text with the decisions made by the Advisory Expert Group and reflected in the *Full Set of Consolidated Recommendations* that was approved by the UN Statistical Commission in 2007. The following section provides some editorial comments identifying paragraphs where there are concerns about the clarity of communication or the accuracy of some of the factual comments. Finally, we are also able to provide a few copy editing comments for some of the chapters. We also encourage the ISWGNA to arrange for a complete copy editing of the text of volume 1.

The title of the updated System of National Accounts

We prefer the title, *System of National Accounts 2008*. We think that it is important that the title should indicate that the SNA is not an out-of-date system and that it has been updated to reflect important changes in the condition of the world's economy. Statistical offices often need to communicate with officials and users who are not familiar with the various versions of the SNA—for example, when requesting resources to implement the update or communicating to users about the relevance of the update. We believe that it would be more difficult to communicate the importance of this update if the title were to suggest an out-of-date standard.

Comments on implementation of AEG recommendations

5.40 (valuation of ancillary output) This paragraph discusses the valuation of ancillary output using the sum of costs (as well as the allocation of its output to intermediate inputs of establishments using indicators of output, etc.), but does not mention that the output should be valued as the sum of costs plus a proportion of the operating surplus, as noted in recommendation 2 of issue 25a.

Paragraphs 6.83 to 6.87 (Production versus output/goods for processing) – The report of the fifth AEG meeting says that for intra-enterprise flows, the idea that change of ownership should be attributed to the establishment (rather than the enterprise) represented a misinterpretation of the AEG’s intent. Therefore, we find it surprising that the draft of this section continues to emphasize the characteristics of economic ownership as applied to establishments, rather than to enterprises. For example, paragraph 6.83 says, “If an *establishment* has no discretion about the level of production, the price to be charged for the good or the destination of the good, there is evidence that the *establishment* has not taken economic ownership of the goods being processed...” Paragraph 6.84 acknowledges that “When the establishments involved belong to the same enterprise, there is no change of ownership since both establishments have the same owner.” Nevertheless, the next sentence suggests that the principle of economic ownership can still be attributed to the establishment: “However, the principle of transferring risk, which accompanies change of ownership, can still be applied.” And paragraph 6.87-6.87a uses assumption of risk as the determining factor for whether output should be measured on a *gross* basis (the total value of the goods produced, inclusive of intermediate inputs) or on a *net* basis (the value of the services contributed to production, exclusive of intermediate inputs): “...output is defined as the goods and services produced by an establishment, a. excluding the value of any goods and services for which the establishment does not assume the risk of using the products in production...” It seems to us that the text of this section is still attempting to apply the principle of change of economic ownership to establishments within a resident multi-establishment enterprise, even though the AEG expressed disagreement with this principle.

We think that the change in ownership principle is not viable for establishments within a resident multi-establishment enterprise. First, industry surveys do not provide information on assumption of risk by establishments; furthermore, we doubt that even if asked, establishments could tell us whether they assume the risk of using products in production. The nature of a multi-establishment enterprise is that the risks are shared among the establishments. Furthermore, we suspect that relatively few establishments in multi-establishment enterprises exercise full discretion over variables such as the level of production or the price to be charged. If this is the case, then the guidelines in this section of the draft SNA (taken literally) seem to risk defining almost all of manufacturing as a service-producing industry. However, we think that data users would generally prefer to maintain recording on a gross basis whenever accurate data exist. BEA’s representative on the AEG thought that the decision was to reject entirely the principle of change in ownership for resident intra-enterprise flows, though the meeting report, unfortunately, does not make clear how the AEG proposed treating establishments in resident multi-establishment enterprises. For these establishments, we recommend that the updated SNA adopt the convention of gross recording except where the enterprise does not maintain establishment-level records that would enable estimation on a gross basis. From informal discussions with several other countries, including AEG members, we think that this approach is closer to the intentions of most national statistical offices.

This issue is fundamental for the updated SNA. **We think it is important to clearly resolve the recording of output of establishments in resident multi-establishment enterprises, and that the decision should reflect the input of practicing national accounts experts and national statistical offices.** We recommend that the best way to quickly resolve it would be by conducting an electronic consultation with the AEG. Such a consultation would provide a clear decision whether criteria similar to change in ownership should apply to intra-enterprise flows (as suggested by the current draft), or whether output of establishments of resident multi-establishment enterprises should generally be recorded on a gross basis.

A related issue (less important) regarding this section is that the draft text tends to be a bit confusing by mixing discussion of goods for processing with discussion of the traditional production of services. We think the explanation would be more understandable, without sacrificing accuracy, if it were limited to goods for processing and did not attempt to cover services. Although subcontracting of services is similar in some respects to goods for processing, usually the transactions associated with the provision of services are the same that the national accounts would like to record, so that the choice between net and gross recording is less relevant. Consequently, change of ownership usually is not a relevant principle for production of services. For example, the discussion in paragraph 6.84 of using coal for generation of electricity doesn't really illustrate the change in ownership principle because it is impossible to imagine any recording other than on a gross basis (since the coal is entirely consumed in the generation of electricity and its ownership rights are no longer relevant). We recommend changing the example to one involving the production of goods and also rewording paragraph 6.87 to focus on the output and ownership of goods, without trying to cover services.

6.123 (valuation of output for own use) – We are glad to see the attempt to provide clear directions on how to measure output for own use, since *System of National Accounts 1993* had included inconsistent guidance. However, we think that several issues need elaboration or modification: (a) If output for own use is produced by non-market producers, it should be valued according to the instructions for non-market output in paragraph 6.128 (discussed below). (b) The formula may need to be modified, depending on whether a portion of other taxes (less subsidies) on production should be included in the net return to fixed capital. We discuss this issue below in our comments on paragraph 6.241. (c) Although we are glad to see the System using the concept of net return to fixed capital, we should recognize that some countries continue to lack basic data on capital stock and will not be able to produce estimates of the net return to fixed capital. In those cases, the SNA should suggest the alternative approach of applying a pro-rated share of operating surplus (net or gross, depending on whether estimates of consumption of fixed capital are available) to the estimate of output for own use.

6.124 – Please note that the rent on land used in production should be added to the list of items that is covered by (gross) mixed income.

6.128 (valuation of non-market output) – We were surprised to see “rent on land used in the production, if any” added to the SNA's list of costs of production for valuing non-market output, since the UN Statistical Commission placed the issue of the net return to

fixed capital for non-market output on the research agenda and we are not aware that the AEG ever discussed rent on land separately from the net return to fixed capital. The treatment of rent on land seems like a fundamental conceptual issue for the System and merits more in-depth discussion than it has received. While we can understand the argument for including rent on land as a cost of production, we also note that including rent only for leased land without imputing a rent for land owned by a non-market unit would create an inconsistency in measuring non-market output. We would prefer that leased and owned land should be treated consistently, so if rent on leased land is treated as a cost of production, then an imputation should be made for owned land used in production. An issue of this importance would benefit from additional consideration by experts, and we would prefer to defer making this change until the issue has been further discussed and vetted.

6.186 (adjusted claims for non-life insurance) – Delete the 4th sentence, “In making the estimate, allowance should be made for the fact that reinsurance may have damped the volatility of claims the insurance corporation has to face and so the figure for adjusted claims is derived from a series of actual claims less (reinsurance claims less reinsurance premiums).” In our comment on paragraph 17.22 below, we explain why this sentence is in error and needs to be removed.

6.241 (capital services) – Although capital services on fixed assets receives considerable attention in the draft text (as was agreed to by the AEG), we do not see much discussion of how to calculate it. This paragraph appears to be the main discussion that is available so far; more detailed directions apparently will be available in chapter 20 of volume 2.

Because it affects some applications of capital services, however, we would like to raise the issue of treatment of taxes on fixed assets in the calculation of capital services. Most of the discussion papers prepared for the Canberra II Group and the AEG issue papers on this topic generally ignored taxes on fixed assets and assumed that for a corporation, the value of capital services on average tend to be close to its operating surplus (with allowance for rent or imputed rent on land). However, the academic literature on capital services and user cost of capital consistently assumes that property taxes and other taxes on the use of fixed assets are paid from capital services; consequently the calculation of capital services includes these types of taxes. This is also the approach taken by the Bureau of Labor Statistics in its estimates of multifactor productivity (see chapter 10 of *BLS Handbook of Methods*, p. 93, footnote 16, <http://www.bls.gov/opub/hom/pdf/homch10.pdf>). Consequently, we recommend that capital services should be assumed, on average, to be approximately equal to gross operating surplus *less* rent on leased land and imputed rent on owned land used in production *plus* recurrent taxes on land, buildings, or other structures *plus* taxes on the use of fixed assets or other activities (motor vehicles). This principle would require modification, for example, to the formula in paragraph 6.123 for valuing output for own use to avoid double counting the portion of other taxes (less subsidies) on production consisting of property taxes and taxes on the use of fixed assets.

10.51e (costs of ownership transfer) – The chapter does not accurately reflect the AEG’s decision on issue 14 that “Installation and de-installation costs should be included in costs of ownership transfer if separately invoiced.” We recommend that paragraph 10.51e change “costs not included in the price of the asset being acquired or disposed of” to “costs that are separately invoiced (otherwise they are included in the purchaser’s price of the asset).”

10.156-10.157 (costs of ownership transfer) – The draft chapter fails to incorporate the AEG’s recommendation that “costs of ownership transfer on disposal of an asset should be written off over the period the asset is held.” We recommend adding text such as the following: “Disposal costs are treated analogously to terminal costs. The costs of ownership transfer that are expected to be incurred on the disposal of an asset are written off to consumption of fixed capital over the period that the asset is held by its owner. The actual disposal costs are recorded as gross fixed capital formation when they are incurred.”

11.22 (one-off guarantees) – one-off guarantees are referred to as contingencies, but there is no mention that these are to be recorded outside the system in a memorandum item.

17.22 (adjusted claims for non-life insurance) – This paragraph introduces a conceptual inconsistency in its last two sentences, which recommend the use of reinsurance claims and premiums in the statistical approach for estimating *adjusted claims* for non-life insurance. The two sentences say, “In considering the past history of claims payable, however, allowance must be made for the share of these claims that are met by under the terms of the direct insurer’s reinsurance policy (if any). Thus the time series needed to determine expected claims is actual claims less (reinsurance claims less reinsurance premiums).”

The statistical approach described in the non-life insurance issue paper and endorsed by the AEG as one of two methods for estimating adjusted claims is based on previous experience of claims and is not affected by reinsurance. The reason that it is inappropriate to consider the direct insurer’s reinsurance is based on another decision that has been approved for the SNA update: reinsurance will now be treated on a gross basis and (as described in section E of draft chapter 17) the relationship between the direct insurer and the reinsurer will no longer be recorded as part of the transactions between the direct insurer and the policy holder. The statistical method described in the last two sections would have been appropriate if the SNA were still using the old net method of recording reinsurance, but under the new gross method it introduces an error into the system.

This error can be observed by noting that subtracting expected reinsurance claims less reinsurance premiums is the same as adding reinsurance premiums less expected reinsurance claims, which according to the statistical approach is the same as the implicit insurance service charge paid by the direct insurer for the output (services) provided by the reinsurer. This should be recorded as intermediate consumption under the new

treatment. Intermediate consumption of reinsurance services is one of the costs that the direct insurer pays from its gross output; adding it again in the calculation of gross output is surely double counting.

Another way to see that the treatment described in this two sentences is wrong is to note that the purpose of the SNA's indirect approach to measuring insurance output is to determine how much of the insurance company's revenue from premiums and premium supplements is available to pay for the production of services after meeting its expected obligations to pay claims. Suppose that insurance company A provides these services through purchasing reinsurance, while insurance company B (presumably larger) is able to spend less on reinsurance per unit of cover by holding and managing a larger portfolio of assets using its own funds. For a policy holder with a given expectation of incurring claims, if companies A and B charge the same premium (and premium supplements), the policy holder should be indifferent between whether the services are provided through reinsurance or through management of own funds. Thus, it is not reasonable to assume that the company purchasing more reinsurance (company A) is offering the policy holder a more valuable implicit service.

The text of paragraph 17.22 should be changed to eliminate this error by returning to the method described in the non-life insurance issue paper, which is based on the previous experience of the level of policy holder claims alone. Although it is not necessary to replace these two sentences, we think the explanation of the statistical approach could be better explained by adding a statement such as the following (drawn from the discussion in the issue paper and BEA's experience in estimating non-life insurance): "For example, the expectation of claims in a year could be estimated as the premiums for the year times a weighted average over several previous years of the ratio of claims to premiums."

17.40, 17.45f, 17.61e (Capital transfers for insurance claims) – The recommendation of the AEG was that payments resulting from exceptional claims due to major catastrophes should be recorded as capital transfers. This decision was approved by the AEG in its first meeting, was subsequently overwhelmingly re-confirmed in an AEG electronic discussion, was recorded as the AEG's final decision in its second meeting, was endorsed in numerous country comments, and was one of the decisions in the *Full Set of Consolidated Recommendations* that were explicitly endorsed by the UN Statistical Commission in 2007. Nevertheless, this recommendation has entirely disappeared from the draft SNA and BPM6. It is very important that this decision be restored to the updated SNA and BPM6.

In the case of major catastrophes, such as hurricanes, earthquakes, and tsunamis, there are large flows of insurance claims, which are used in gross fixed capital formation to rebuild fixed assets such as dwellings and other buildings. Because the loss of these assets is recorded outside of the current accounts, in the other changes in volume of assets account, it is appropriate that the claims be recorded in the capital account. (In non-catastrophic cases, the losses are part of consumption of fixed capital, which is shown as a charge against income in the current accounts; therefore it is appropriate to continue to

show the claims resulting from non-catastrophic losses as current transfers.) These exceptional claims should be recorded as capital transfers regardless of the sector to which they are paid, and should include exceptional insurance or reinsurance claims paid by or to the rest of the world.

The experience of countries such as the United States that occasionally suffer major catastrophes shows that a failure to implement the AEG's recommended treatment would result in very large temporary increases in disposable income and saving of sectors that suffer insured losses due to catastrophes. Such estimates would be quite difficult to explain to the public and would potentially open the national accounts to criticism and ridicule. We strongly recommend that the updated SNA be revised to reflect the recommendation that exceptional claims be treated as capital transfers. For example, the following sentence could be added: "In the case of major catastrophes, the exceptional claims—that is, the difference between claims and adjusted claims for the year—are recorded as a capital transfer to policy holders."

These draft paragraphs (17.40, 17.45f, 17.61e) include a new possibility for a capital transfer for the case in which insurance companies set their premiums too low to cover their expected claims. Because this case seems somewhat contrived and quite unlikely to be observed in any country's actual accounts, it hardly seems necessary to devote so much text to its treatment. However, if this case were ever actually encountered, the proposed treatment is unobjectionable, so we have no objection to retaining this language.

17.170-17.176 (pensions and the issue of promotions) – Our understanding is that the updated SNA would present the ABO and PBO methods as options and not favor one over the other. However, we find the discussion of ABO versus PBO methods to be unbalanced by explaining the benefits of the PBO approach without providing a similar explanation of the benefits of the ABO approach. The text should mention that employers may have the right to freeze the scheme (that is, take away the rights of employees to accrue new benefits), terminate the scheme, or change the formula covering future accruals in a way that deprives employees of the opportunity to gain accrued benefits from future promotions. It should state that the employee has a legal right to his or her ABO entitlement, but not to the additional benefits that might accrue from future promotions, which are only included in the PBO entitlement. Consequently, if there is significant uncertainty about the future of the scheme, the ABO measure may be the more appropriate one.

Comments on points of clarity or accuracy

3.36 1st sentence is possibly confusing. Perhaps "Financial assets consist of all financial claims, all corporate shares, and gold bullion held by monetary authorities."

3.50 5th sentence possibly confusing. Perhaps, “...except two—the other changes in the volume of assets account and the revaluation accounts. Other flows appear only in these two accounts.

6.85-6.87 and **6.118-6.119** – There is some inconsistency in the text about the possibility of recording own intermediate consumption (other than for goods being withdrawn from inventories). Paragraph 6.87b appears to preclude the recording of own intermediate consumption (other than inventories), whereas 6.119 is consistent with the AEG decision that allows recording of own intermediate consumption when it serves a special analytical purpose. The text should clarify that the general rule is not to record own intermediate consumption, but compilers may choose to record own intermediate consumption in exceptional cases where it is analytically useful.

6.203 – This paragraph on research and development contains similar language to that which was part of the 1993 SNA, where R&D is described but not defined for market producers and for non-market producers. Since the updated SNA now explicitly defines R&D in chapter 10 paragraph 10.104, the reader of chapter 6 should be referred to this definition.

7.122, last sentence, our reader found this sentence to be unclear and did not think that it provides an adequate explanation of when dividends are to be recorded.

10.98 and **10.104** – The revised SNA identifies intellectual property products as a category of produced assets, and the table of contents of chapter 10 suggests that research and development is a subcategory of intellectual property. However, the language about research and development in paragraphs 10.98 and in 10.104 is not completely consistent and may be confusing. In paragraph 10.98 the intellectual property product is identified as the *results* of research and development (10.98) and in 10.104 it is the research and development *expenditures* themselves that become assets (10.104). It is not clear whether this distinction between the *R&D expenditures* and the *results of the R&D expenditures* is intentional and has a particular meaning. Our understanding is that in the absence of a sound valuation method for the results of R&D, it is acceptable to proxy the value of the addition to gross fixed capital formation with expenditures. If so, perhaps the words “the value of expenditures on” should be removed from the first sentence of paragraph 10.104. Otherwise, some clarification would help.

17.13, we note that paragraph 6.181 provides a nice explanation of the rationale for the System’s indirect method of measuring output of non-life insurance, but a similarly clear explanation is not given in chapter 17. To assist readers of chapter 17 to understand why output is derived in this manner, we suggest that the explanation from 6.181 either be repeated or explicitly referenced.

17.23, the term “equalization provision” may not be familiar to many readers and perhaps should be explained.

17.33, 3rd sentence – The following statement does not appear to be consistent with data that we have analyzed on reinsurance in the United States: “because the market for reinsurance is concentrated in relatively few large firms world-wide, it is less likely that the reinsurer will experience an unexpectedly large loss than a direct insurer does...” We note that although reinsurers tend to be large firms, their losses are also affected by very large events such as hurricanes, earthquakes, and tsunamis that occur throughout the world. Our country’s data indicate that the relative volatility of losses for reinsurance is larger than the relative volatility of losses for direct insurance.

17.111-17.180 (pensions) – Employers who sponsor defined benefit plans sometimes contract with life insurance companies to take responsibility for the benefits. Some comment should be made how to handle these transactions.

17.121 – We suggest changing the parenthetical, “(The expression ‘defined contribution pension scheme’ is not intuitive but is widely used in the pension industry.)” to “(The expression ‘defined contribution pension scheme’ is used because the documents of the scheme define a formula for how much the employer is to contribute to the scheme, rather than a formula for determining the benefits directly.)”

17.125 – We find the discussion puzzling or incomplete in two respects: (a) If a pension fund is part of the same institutional unit as the employer, the fund must be “segregated” (the term used in SNA 1993) or else it is no different than a notional fund. (b) If a life insurance company is contracted to take responsibility for the benefits, an explicit fund may not exist.

17.128, 17.129 – The discussion of the attribution of investment income of pension funds to the households that have claim on these investments is unclear about which individuals in the household sector have these claims. For example, paragraph 17.128 refers to “distributed to (receivable by) the employee...” whereas 17.129 says “income distributed to the pension beneficiaries.” We note that there are four categories of individuals in the household sector that all have claim to the assets of the investment income of the pension fund: a) employees, b) former employees who are vested in the pension scheme but are not yet receiving benefits, c) individuals who have rights to future pension benefits due to their relationship with a living or deceased employee, such as widows, divorced partners, dependent children, etc., and d) pension beneficiaries who are currently receiving benefits. We think the text would be clearer and more accurate if it used a term encompassing all of these individuals, such as “participants” in the pension scheme.

17.131 – Guidance should be given about how to record contributions of the self-employed—are they treated as employers’ contributions?

17.132 – The second sentence—“However, the benefits payable under a defined contribution pension scheme take the form of a lump sum payable at the moment of retirement”—is not true as a general principle, at least in the United States. Pension plans frequently offer retirees multiple options, including deferred or gradual withdrawals. The sentence could be corrected by saying that *some* schemes require

lump-sum withdrawal and immediate conversion to an annuity. Also, our reader was not able to understand the last two sentences, so some further explanation may be needed.

17.133 – We find the logic of this paragraph to be unconvincing. Benefits from defined contribution *are* in the nature of withdrawals from saving, and we do not find the alternative view of them as social transfers to be plausible. Moreover, there is no reason to expect that withdrawals in a year will approximate entitlements in a year. Because this paragraph is not strictly needed for the exposition of this section, we suggest that the paragraph might be deleted.

Table 17.7 – We are not able to follow how to derive the household saving of 56.8. Furthermore, it is unclear why the sum of saving by sector does not equal the total economy.

17.138 – To avoid confusion with the benefits paid to retirees, in this paragraph we recommend that “benefit” and “benefits” be changed to “benefits accruing.”

17.153 – The difference between contributions payable to the plan and benefits receivable from the plan is much more likely to be negative than this paragraph implies. First, benefits are often partially funded by holding gains on plan assets. Second, a plan with some active employees might have falling assets if enough retirees were receiving benefits. Finally, the employer need not be defunct to have zero active participants; the defined benefit plan may have been closed to new participants and replaced with a defined contribution plan.

17.167, 3rd sentence – We recommend adding “changes in interest rate assumptions” and “changes in employee separation rates or retirement ages” to this list. These are also important sources of changes in the value of the actuarial liability (entitlement).

17.171, 7th sentence – Change “an individual’s ABO” and “PBO” to “an individual’s ABO entitlement” and “PBO entitlement” (The “O” in ABO and PBO stands for “obligation,” which refers to the obligation of the employer or of the scheme.) Similarly, in subsequent paragraphs, references to the ABO or PBO should be followed by either “entitlement” or “accrual of benefits” to make clear which concept is being referenced.

Copy editing comments

3.27 Replace “with in” with “within”

3.40 Replace “s” with “as”

3.70 Insert a space between GFSM2001 and as.

3.76 Last sentence, add “in this chapter” after “section on valuation.”

3.169 There must be some text missing from this sentence, but we can’t tell exactly what.

7.23. 2nd sentence, insert comma after “dividends”

11.34: In the second sentence, change “rice” to “price.”

11.50: In 4th sentence, change “as the a” to “as a”

17.21, 2nd sentence, change “covering” to “coverage” or “cover”

17.143, 5th sentence, change “there” to “these”

17.148, 1st sentence, change “are” to “is”

17.174, 2nd sentence, change “PBO” to “PBOs” and delete “be” before “increase”