Comments on draft SNA chapter:
Chapter 28: Input-output and other matrix-based analyses

Deadline for comments: 1 November 2008
Send comments to: sna@un.org

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Submission date:	2008-10-29

This template allows you to record your comments on draft SNA chapter 28 "Input-output and other matrix-based analyses" and, at the same time, makes it easy for us to use your comments in considering revisions to the draft chapter. You may complete any or all parts of the template.

There is no file comparing existing text with draft text for this chapter because the draft is largely new text.

Save this template and send it as an attachment to the following e-mail address:
sna@un.org

Note

The chapter does not attempt to describe IO tables at any length. There are many other documents that do this including the newly released Eurostat manual. The chapter concentrates only on the process of converting the supply and use tables to a symmetric format.

The material in section B was suggested at a stage too late for incorporation in chapter 14 but was felt to be useful to include in this chapter.

There are two large tables needed for the chapter that are still under preparation; these are the table showing the supply and use table with the cross-classification of intermediate inputs by industry and institutional sector and the symmetric IO table. They will be posted as soon as they are available but should not be a cause for delaying the comment on the chapter.

Part I: General comments

In the space below, please provide any general comments. This may cover e.g. the structure of the chapter, issues missing and (lack of) consistency with other chapters of the 2008 SNA.

General comments:

General comment	- The overall discussion on the compilation of input-output tables and analysis does not address some of the more essential issues, and therefore should be expanded. The part describing technical assumptions in converting SUT to I-O tables is not clear and not accurate (about negative value). Because of the controversy and long-term debate around this issue – both in theory and in practice - it should be carefully rewritten and reflect the more recent views of the I-O community (Bent Thage made recommendations for the SNA update in 2006).
	-The Part B is better fitted in chapter 14. Could we move it when a complete 2008 SNA is produced in 2009?
	- There is no reference to derived tables, such as the total requirements matrix which can be produced: industry-by industry, commodity by commodity, and industry by commodity.
	We would like to see a longer discussion on the assumptions used to derive the industry by industry and product by product tables, drawing on Bent's paper, (and those of Nadim Ahmad at IARIW in 2006). At the very least some attempt should be made to lengthen the commentary on IXI tables, so that it's similar in size to the PXP section. There's a long on-going debate about the merits of these two presentations which confronts some notions of conceptual purity with data. The OECD's preference is for IXI tables, following the arguments made by Nadim and Bent. Retaining the relative sizes as they are in the current text may be seen, albeit implicitly, as favouring the PXP school.

Part II: Comments on specific draft paragraphs and sections

All comments on specific draft paragraphs are welcome. They can be about e.g. scope, content and clarity. Proposing a concrete alternative text or table is also possible. For the paragraphs in separate sections, separate forms are used for providing and collecting comments (see below).

A. Introduction (paragraphs 28.1-28.4)

General comment	It is necessary to mention that some countries (Japan, for example) compile input-output tables directly from source data. The discussion of advantages and disadvantages for such a practice can be useful in relation to the selection of "technology assumptions" when transforming supply-use tables to input-output tables.

28.17-18	It seems the text is suggesting that SUT compilers are able to choose one of the two approaches, but that's not the case. Only the first approach is valid. SUT is part of the national accounts, so it should be consistent with the production account in treating goods for processing. If a country adopts the SNA 2008 recommendations to record "goods for processing" on an ownership basis, it should use the first approach.
28.20	Although we have some sympathy for the Eurostat view (re the data difficulties, business burdens etc), we think the paragraph and implicit encouragement to provide a breakdown into market, non-market and own final-use should remain. The major part of output for own-final use is GFCF and this is needed in any case. Providing a split between market and non-market should not be difficult because the data to make the split come from separate sources
28.22	Suggestion: After " …in the corresponding row totals," add "That is to say, the total input of an industry (product) equals to the total output of that industry (product) in the economy." The sentence "Further, the inter-industry part of the matrix becomes square which means that it can be inverted" is not accurate. Not all square matrices can be inverted – they must be non-singular. Also, there is no analytical interest to invert "inter-industry part of the matrix." Suggest change this sentence to: "Further, the intermediate consumption matrix, which is generally a square matrix, provides essential information of inter-industry (product) relationships. It is used to derive direct and indirect coefficients and various multipliers through matrix operations for economic analysis."
28.24	The sentence "… after **the man who invented the idea of input-output tables**…" It is more accurate to say "**the man who pioneered input-output tables and analysis**" since original idea can be traced back to 18th century
28.25	The text only discusses the meaning and usefulness of matrix A. It is necessary to add a paragraph discussing matrix [I-A]-1 because it is more widely used and has more analytical meaning in input-output modelling and analysis.
28.37	There's some confusion in the second sentence of the first para : *The industry technology assumption is most appropriate for by-products. It implies that even if the output mix of an industry changes, the proportions in which the inputs are used are not affected*". Although it is true that the assumption assumes that industry input-output proportions remain fixed it is because it implicitly assumes that the output mix does not change. This may be the reason why Eurostat are unhappy about it. With the implied changes to the text above we would

	be happy leaving a reference to the industry-technology assumption in, especially because, despite Eurostat's misgivings about its relevance, it is widely used, if only because of its simplicity.
28.38	It's the product-technology assumption that results in negatives, not the industry-technology assumption. The confusion here arises from the mistake in the table which shows the negative under the industry-technology assumption (but the calculation is based on the product-technology assumption). The corresponding mistake holds for the product-technology assumption column (which shows the industry-tech calculation). The sentence "Negative entries cannot appear under the product technology assumption and their appearance under the industry technology assumptions is one reason why the product technology assumption is often preferred" is wrong.
28.39	It should be noted that the hybrid technology assumption is considered by some countries to be the preferred approach (such as USA and Denmark). There should be more description about this approach.

* Insert rows in this Word table for each paragraph on which you wish to comment.

B. Further discussion of the supply and use tables (paragraphs 28.5-28.20)

General comment	Click here and start typing.
28.5	Click here and start typing.
*	Click here and start typing.

* Insert rows in this Word table for each paragraph on which you wish to comment.

C. Deriving an input-output table (paragraphs 28.21-28.41)

General comment	Click here and start typing.
28.21	Click here and start typing.
*	Click here and start typing.

* Insert rows in this Word table for each paragraph on which you wish to comment.

D. Expressing the sequence of accounts in matrix form (paragraphs 28.42-28.52)

General comment	Click here and start typing.

28.42	Click here and start typing.
*	Click here and start typing.

* Insert rows in this Word table for each paragraph on which you wish to comment.

E. Social accounting matrices (paragraphs 28.53-28.56)

General comment	Click here and start typing.
28.53	Click here and start typing.
*	Click here and start typing.

* Insert rows in this Word table for each paragraph on which you wish to comment.

Part III. Other specific comments

You are welcome to make other specific comments. To assist you in doing so, the following points are provided as a guide to the types of points on which you might wish to comment. Note, though, that you are not restricted to commenting on only these points.

1. Is the alternative treatment of the CIF to FOB adjustment clear?

2. Is the impact of the revised treatment of goods for processing on the SUT clear?

3. Is the discussion on how to convert the SUT to IOT clear?

4. Is the matrix presentation of the sequence of accounts clear?

5 Are there references that should be added (especially for SAMs)?

Specific comments:

Specific comments	2. The impact of the revised treatment of goods for processing on the SUT is NOT clear. "...to treat processing own account and on behalf of another as different types of activity and different products" (28.17) Here it is easy to understand that "difference products" can be distinguished as "primary product" and "secondary product", which are located on the main diagonal and off-diagonal cells in a supply table, respectively. But where to put the "different types of activity" in the table? A more detailed description is needed.

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You are also welcome to comment directly on the PDF file of the draft chapter. Please do so by using Adobe Acrobat Version 6 or 7.

If you don't have Adobe Acrobat Version 6 or 7 and would like to make detailed comments, please send a message to sna@un.org requesting a version of the draft chapter that permits you to comment. To optimize your commenting tools, please download Adobe Reader 7.0 for free from http://www.adobe.com/products/acrobat/readstep2.html