Comments on draft SNA chapter:
Chapter 16: Price and volume measures

Deadline for comments: 5 October 2007
Send comments to: sna@un.org

Your name:	Charles Aspden
Your country/organization:	OECD
Contact (e.g. email address):	Charles.aspden@oecd.org
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This three-part template allows you to record your comments on draft chapter 16 easily 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 one, any two, or all of the three parts of the template.

There is no file comparing existing text with draft text for this chapter due to the large amount of new text in this chapter.

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

Part I: General comments

In the space below, please provide any general comments, such as about the clarity with which the new recommendations were incorporated (30 words or less).

Comment:

> The text is very clear. A small deficiency is that the importance of services is not reflected in the draft, maybe because very little can be found of services in the literature. One could consider adding a reference to the OECD-Eurostat methodological guide for developing services PPIs to the end of par. 16.3.
>
> For example:
> Reflecting the high importance of services there is ongoing work to develop guidelines that focus specifically on them. The OECD and Eurostat have published jointly *Methodological Guide for Developing Producer Price Indices for Services* that discusses primarily business services. The publication is available also on the OECD and Eurostat websites.

Part II: Comments on specific draft paragraphs or passages

In your review of draft chapter 16, you may wish to devote particular attention to the passages listed below. For ease of reference, we have identified the relevant paragraphs.

Please use the space provided to the right of the paragraph number to make your comment.

Index number theory

Section B presents an overview of index number theory as applied in the System. It has been updated to reflect work during the last decade embodied in the new manuals on consumer price indices, producer price indices, and export and import price indices (available in draft).

1. Paragraphs 16.10 - 16.88 present this overview. Are these paragraphs clear and appropriate to the SNA?

General comment	There are some minor errors regarding the characters used in subscripts and under summation signs. These are amended in the attached PDF file.
16.81	Rather than referring only to buildings the paragraph should be more general: *Model pricing* The characteristics of products such as buildings and other structures are so variable that it may be almost impossible to find identical products being produced in successive periods of time. In these circumstances, a small number of hypothetical and relatively simple standard products may be specified and their prices estimated in each of the periods. The specifications of these standard products are chosen on the advice of construction experts who are also asked to estimate what their prices would be in each of the periods. Services, business services particularly, are largely unique and model pricing is often the only possibility to track the evolution of prices and volumes. However, its implementation is less straightforward than for goods because services and their characteristics are normally more difficult to identify and, as for model prices in general, ensure their representativity in the market.

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

Derivation of volume measures in the national accounts

Section C is considerably expanded from its counterparts in the *SNA 1993*. The ISWGNA agreed that this expansion was needed and that the new price manuals provided useful input for the expansion.

2. Paragraphs 16.89 - 16.183 cover price deflation vs. quantity revaluation, volume measures of the output estimate of GDP, volume measures of the expenditure

estimate of GDP, volumes and prices for stocks of non-financial assets and consumption of fixed capital, components of value added, measures of real income for the total economy, and other aspects of price and volume measurement. Are these paragraphs clear and appropriate to the SNA?

General comment	Click here and start typing.
16.90	The end of the second sentence is not very clear for non-native English speakers. It is better to have: "….implicitly, by dividing indices of the current price values by corresponding volume indices".
16.102	There is an error in the description of how FISIM is derived at current prices. This has been corrected in the accompanying PDF file.
16.103	Social transfers in kind are valued at their net value, i.e. the value of output less the payments made by households. Therefore, the second sentence should be: "This output consists of individual goods and services delivered to households and collective services provided to the community as a whole. "
16.163	There are a few problems with this paragraph. First, it should be spelt out that NOS at constant prices can be obtained indirectly by subtracting the constant price estimates of CFC and CoE from the constant price estimates of value added for the corporate sector. Likewise, for constant price estimates of NMI for the household sector. Second, the last two paragraphs are unclear, and the following is suggested. "But net operating surplus (or net mixed income) does not have price and volume dimensions. Therefore, it is not possible to derive a volume measure of it directly, and so it is not possible to derive an independent volume measure of GDP by the income approach, i.e. by aggregating volume measures of CoE, GOS (or NMI) and taxes less subsidies on production. "

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

International price and volume comparisons
Section D presents the theory and practical aspects of international comparisons of prices and volumes. It draws on the most recent round of the International Comparison Program, which involved 107 countries.

3. Paragraphs 16.184-16.225 present this material. Are these paragraphs clear and appropriate for the SNA?

General comment	
16.185	The end of the paragraph: ……Used as deflators, they enable cross-country comparisons of GDP and its expenditure components.
16.188	Item (a) is taken directly from the SNA by picking up two first sentences

	and leaving the rest out. This has made the text impossible to understand. The whole text, and proposed additions in red, is the following:
	In time series, it is customary to compare two time periods of the same duration, such as a year. In international comparisons, however, it is not customary to compare areas or regions of equal size. On the contrary, comparisons may be made between economies that are of entirely different orders of magnitude, one perhaps being 10 or 100 times greater than the other. It is as though a volume comparison were to be made between a complete decade and a single year. It is difficult to interpret such data as if they were different points on the same underlying production function. It is also less obvious that two economies of very different sizes should be treated symmetrically
	Consider the following alternative: In time series, it is customary to compare two time periods of the same duration, such as a year, and, if there is no long time span between the periods, the economy in these two periods remains relatively comparable. On the contrary, international comparisons may be made between economies that are of entirely different size and stage of development. It is difficult to interpret such data as if they were different points on the same underlying production function. It is also less obvious that two economies of very different sizes should be treated symmetrically.
	Another option is simply to drop the item.

16.190-211	**A major problem:**
	Estimation of PPPs for basic headings and aggregation of basic heading results should be discussed separately. Here they are lumped together. There are two main options:
	
	An easy solution - As in SNA1993, don't discuss estimation of PPPs for basic headings but explain only the aggregation:
	• Add a paragraph after 16.189 explaining that there are two stages in the compilation – estimation of PPPs for basic headings and aggregation but only the latter is described here.
	• Drop paragraph 16.204 that describes the CPD method. The CPD is a method applied at the basic heading level.
	• Discussion on spanning trees (16.205-208) may also be better to be dropped because spanning trees are not used in the ICP, at least for aggregation. (Spanning trees may be a nice way to show differences and similarities between countries but using them for aggregation is questionable).
	
	A more complicated (but better) solution - Explain both stages of PPP compilation:
	• Add text after 16.189 explaining that there are two stages in the compilation – estimation of PPPs for basic headings and aggregation. Mention also that there are many kinds of methods but only the main ones are briefly described.
	• Describe estimation methods used for BHs.
	    o Transfer paragraphs discussing representativity and comparability (16.217-218) into this part.
	    o Describe briefly binary comparison without going into details and without formulae.
	    o Describe the EKS procedure by utilising paragraphs 16.200-202 where the method is described in the context

	of aggregation
	     o Transfer paragraph 16.204 describing the CPD method here.
	  • Describe aggregation methods
	     o Paragraphs 16.190-199
	     o Modify paragraphs 16.200-202 by taking into account that the EKS procedure is described already before.
	  • Drop discussion on CPD and spanning trees (16.204-208).

16.199	Statement starting in the middle of the paragraph is wrong. It can also be made more general: … PPP-based expenditures are generally **overstated** for atypical countries. This is called the "Gerschenkron effect." The smaller and poorer countries have smaller weights and, if their price structures deviate significantly from the mainstream, resulting PPPs become relatively low and, consequently, real GDP relatively high.
16.201	The names are Elteto, Koves and Szulc. (These spelling errors are copied from SNA 1993!)
16.203	The difference between b and c is small. Can they be combined?
16.219-16.222	It should be also pointed out that the concept of production is fundamentally different in the NA (where location is an essential characteristic of a product) and PPP comparisons (where country averages are used). This difference influence results if the economy has been under strong change in the period compared. As seen below there are also other deficiencies in the text.
16.212	The first two sentences ignore the multiple uses of PPPs. Replace the paragraph with "One of most important uses of PPPs is to calculate comparable estimates of GDP and its major components, expressed in a common currency where the effects of differences in price levels between countries are removed. Their estimation is integral to the national accounts in two ways. On the one hand, the national accounts provide the weights that are used to aggregate prices from a detailed level to broader aggregates, up to GDP itself. On the other hand, the national accounts provide the values that are "deflated" by the PPPs to provide the volumes (also referred to as "real expenditures") expressed in a common currency that enable GDP and its expenditure components to be compared between countries."
16.216	Slightly more could be explained in the last sentence. Add to the end: "An important issue is the consistency between the prices used in the national accounts and those used in calculating PPPs. Also price and volume structures may change significantly and, as a result, evolution of GDP according to two benchmark comparisons may sometimes be very

	different from extrapolated GDP series."
16.217-218	As noted before, the discussion of representativity and comparability is related to the estimation of PPPs at the basic heading level and are better to be discussed under that section (if such a section is established).
16.218	The sentence: Once a representative product is selected….. A product should be representative at that particular point of time. Representativity over time is not required (although it is nice to have such products in a comparison). The last sentence should be dropped.
16.219	Delete the lower part of the paragraph starting: The assumptions involved…. Results are **independent** of the numeraire country.
16.220	The description of extrapolation (starting: Therefore, an approach…) is equivalent to the description in paragraph 16.119. The paragraphs could be combined or appropriately edited to make it clear.
16.222	The paragraph misses the point, which it that in practice the same products may be sold to different countries at different prices. At least in theory, there is no inherent inconsistency problem between imports and final demand. A much more important problem when comparing NA and PPP results: "Inconsistencies" are primarily not stemming from using "wrongly" exchange rates in PPP comparisons but from changes in terms of trade. Changes in terms of trade fall in prices in national accounts and in real values in PPP comparisons. Nothing is necessarily wrong but the difference between NA and PPP results may be huge if the share of exports and imports on GDP is high (note: in terms of **gross**, not net trade).
16.223	It is fair to mention that there is ongoing work to develop proper measures for health and education.

Part III. Other specific comments

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

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