

Update of the 1993 System of National Accounts

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The update of the 1993 System of National Accounts (1993 SNA) that was begun five years ago is now in its final stages. A “pre-edited, white cover” version of Volume 1 of the 2008 SNA, which comprises the first 17 chapters of the complete manual, was released on the website of the United Nations Statistical Division (UNSD) on 8 August 2008 <http://unstats.un.org/unsd/sna1993/draftingphase/WC-SNAvolume1.pdf> . Volume 2 is expected to be approved by the United Nations Statistical Commission at its meeting in February 2009. A final version of the complete 2008 SNA is expected to be published in English later in 2009 – maybe in one or possibly two volumes. Publication of the 2008 SNA in the other official languages of the United Nations will follow.

The preparation of Volume 2 is in progress, and draft chapters are being posted on the UNSD’s website for world-wide comment progressively <http://unstats.un.org/unsd/sna1993/draftingphase/chapterissuematrix.asp> .

Major changes in the 2008 SNA

Changes to previous recommendations and entirely new recommendations in the 2008 SNA cut across almost all parts of the manual, but they are concentrated in parts that deal with non-financial assets, financial services and financial instruments, the rest of the world (balance of payments) and government and the public sector. In other words, the majority of the recommendations relate to units and transactions that represent characteristics of an increasingly globalised economy, innovation in financial instruments and stronger interest in the sources of wealth and debt of the private and the public sectors. Some of the recommendations affect major aggregates of the System, such as GDP and saving, as would be expected of an update intended to capture the evolving aspects of production, consumption and accumulation. Many other recommendations do not affect the major aggregates but reflect a range of other elements, including elaborations and clarifications of definitions and classifications.

Some of the major changes are:

- New recording of pension schemes
- Explicit recognition of capital services
- Recognition of the outcomes of Research and Experimental Development (R&D) as fixed assets
- Recognition of offensive weapons and their means of delivery as fixed assets
- Goods for processing to be recorded on a change of ownership basis

A brief description of these changes follows. Further details for the above issues can be found in the 13th edition of the *Statistics Brief “The revision of the 1993 System of National Accounts – what does it change?”* <http://www.oecd.org/dataoecd/32/39/39267818.pdf> .

New recording of pension schemes

As a result of increasing longevity and low birth rates many countries are experiencing increases in the average age of their population, with the expectation of further increases for many years to come. Among other things this has major implications for the provision of pensions for retirees in future years. The 1993 SNA only gives a partial picture of the pension obligations of businesses and government, and it has been widely accepted that a fully comprehensive picture is needed.

The 1993 SNA makes a distinction between employer pension schemes and social security even though both are part of social insurance schemes. Employer pension schemes are viewed primarily as being a means of redistributing income over time for a single individual. Depending on the conditions of employment, an employee builds up a claim on his employer during his period of employment for income to be paid after retirement. Social security schemes, in contrast, primarily redistribute income among a set of individuals at a single point in time. It is this notion of redistribution between large sections of the population within the current period that leads to their funding on a pay-as-you-go-basis.

The 2008 SNA recommends that the full pension entitlements of households accruing in private employer pension schemes should be shown in the accounts. For defined contribution schemes this is determined by the actual contributions in a period, but for defined benefit schemes they will have to be determined actuarially. The same applies in principle for government employer pension schemes. But there is a problem here because for some countries it is difficult to distinguish between government employer pension schemes and social security schemes. To overcome this difficulty the 2008 SNA recommends that a standard table should be prepared in conjunction with the regular accounts showing the pension entitlements accruing to households for all pension schemes, regardless of the means of funding or the category of the unit bearing the responsibility to meet the obligations of the pension scheme. Countries will have flexibility about whether all of these schemes should be carried forward to the “core accounts” (that is, whether the full increase in the entitlements will be shown as income and saving of households), but in cases where particular schemes are not carried forward, a reasoned explanation for why this is not done will be required.

Cost of capital services

Capital services provided by non-financial assets to the production process are not explicitly mentioned in the 1993 SNA. The OECD manual *Measuring Capital*¹ defines capital services as inputs that flow to production from a capital asset. When assets are used by their owner, the value of capital services appears implicitly as part of the gross operating surplus. It can be estimated as the sum of depreciation, expected real holding gains/losses and a return to capital, similar in value to the cost of interest on the remaining value of the asset.

The recommendation begins by noting that capital services for assets used in market production are implicitly included within the 1993 SNA but are not separately identified. Given the importance of identifying them for productivity measurement and other analysis, a new chapter (20) is included in the 2008 SNA explaining the role and appearance of capital services in the system and stressing the desirability of calculating capital services, capital stock and consumption of fixed capital in an integrated and consistent manner. No changes will be made to standard entries in the accounts to show capital services but an explanation will be provided of how supplementary items or tables could be derived and presented. Hence, there is no recommendation to include capital services in the core accounts, but some countries may choose to include them as “of which” items for gross operating surplus (or value added in volume terms).

Research and experimental development

The 1993 SNA does not recognize research and experimental development (R&D) as an asset, despite the fact that it is thought to be a major contributor to future economic growth. R&D undertaken on own account is not recorded as output and expenditures on R&D are recorded as consumption, with the result that GDP is understated. Stocks of R&D assets are not recorded in the balance sheet, and hence the net worth of a country is also understated. The 2008 SNA changes all this by recognizing R&D as a fixed asset

¹*Measuring Capital* is undergoing a revision. The new edition is expected to be released shortly.

and records expenditures on R&D as capital formation in just the same way as buildings, equipment and software, etc.

While there is strong support by countries for adopting these recommendations in the SNA, there is also considerable concern about the difficulties of measurement. For this reason many countries are constructing R&D satellite accounts and will not incorporate their estimates into their core accounts until they are satisfied of their efficacy. Several OECD Member countries have already compiled R&D satellite accounts and EU countries as a whole are expected to begin doing so on an annual basis in the next few years.

To help countries in this work and to foster international comparability, the OECD has set up a task force to develop a handbook that will provide guidance on the compilation of gross fixed capital formation and other capital measures² of intellectual property products. Although the major reason for taking this initiative is to provide guidance for deriving measures of R&D, the handbook will also provide guidance on the three other types of intellectual property products: software and databases; entertainment, literary and artistic originals; and mineral exploration and evaluation.

Weapons systems

In the 1993 SNA, offensive weapons and their means of delivery are excluded from capital formation regardless of the length of their life. That treatment implies that military assets provide defence services only and entirely in the period of acquisition. Further, weapons whose expense has been expressed as intermediate consumption, according to this treatment, can be sold or exported in another accounting period, calling for counter-intuitive entries in the accounts for government.

The recommendation in the 2008 SNA is that all military expenditure that meets general SNA criteria for capital formation — that is, being used in production over a period in excess of one year — will be treated as capital formation. Weapons systems and military inventories will be distinguished within fixed capital formation and inventories, respectively.

Goods for processing

Both the 1993 SNA and the *Fifth Edition of the Balance of Payments Manual* (BPM5) treat goods that are sent abroad for processing and then returned to the country from where they were dispatched as undergoing an effective change of ownership. The goods are therefore recorded in exports when they leave the first country and again in imports when they return to it. The country undertaking the processing is shown as producing goods that are recorded at their full value, even though the processor never has to pay for the value of the goods on entry. With the increasing importance of offshore processing, such treatment is increasingly questionable.

The 2008 SNA recommends that imports and exports should be recorded on a strict change of ownership basis. That is, goods being processed in one country on behalf of another should not be part of imports and exports in the balance of payments and SNA. The consequences affect the recording of transactions within the national economy as well as international transactions. The decision to record on a pure change of ownership basis implies that no transactions will be recorded for intra-enterprise (inter-establishment) deliveries when goods are passed from one establishment to another for processing and then returned. The change has implications for the input-output tables, which on the proposed basis will reflect what each unit contributes to the production process rather than the physical technology, as previously was the case.

Introduction of the 2008 SNA by OECD countries

² Capital stock, consumption of fixed capital (CFC) and the provision of capital services.

It is likely that nearly all OECD countries will implement most of the changes in the 2008 SNA over a five or six year period, starting at the end of 2009. Australia is expected to be the first country to make the change in late 2009, and the US and Canada are expected to follow in 2012-13. The European Union is revising its own national accounts manual the *European System of Accounts 1995* (ESA95) to be consistent with the 2008 SNA. The aim is that the revised ESA should be formally adopted in 2011 and that EU member countries should implement in it their national accounts in 2014.

It is expected that as countries adopt the new SNA and ESA they will make estimates on both the old and new bases for an overlap period, but it is unlikely that countries will continue to compile “old” and “new” estimates in parallel for subsequent periods. This means that there will be a reduction in comparability of *levels* for a number of years, but it is unlikely that any of the changes will have much impact on GDP growth rates. Users will be informed about the progressive adoption of the 2008 SNA and revised ESA with appropriate metadata in OECD publications and data releases.