# SNA News

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### ESTIMATES OF THE UNRECORDED ECONOMY AND NATIONAL ACCOUNTS Declaration of the ISWGNA

The degree to which official national accounts estimates cover the economy differs among countries. Statistical authorities of some countries make explicit and comprehensive estimates of activities not recorded from the usual data sources—be it because these are illegal, underground, or simply outside scope<sup>1</sup>. In other countries, statistical authorities do not provide such estimates, a situation that sometimes prompts unofficial estimates. These unofficial estimates may have a sound statistical underpinning, but many are based on bold assumptions and few actual data. The Intersecretariat Working Group on National Accounts<sup>2</sup> (ISWGNA) feels it is necessary to alert users to the limited value of these unofficial estimates in terms of reliability and accuracy.

Unofficial estimates are often based on macro economic models. For instance, they may assume a fixed relation between the size of the economy and money in circulation. Such methods may yield grossly exaggerated results, attracting the attention of politicians and newspapers and thereby gaining wide publicity. The OECD-ILO-IMF-CIS manual on measuring the non-observed economy<sup>3</sup> rejects such "macro-model" methods because these methods suffer from serious problems that cast doubt on their utility for any purpose in which accuracy is important. In particular, they are completely unsuitable for use in compiling the national accounts.

Signed: the members of the ISWGNA January, 2006

<sup>3</sup>http://www.oecd.org/document/49/0,2340,en\_2649 \_34253\_2463473\_1\_1\_1\_1,00.html

### LATEST RECOMMENDATIONS OF THE STATISTICAL COMMISSION ON THE 1993 SNA UPDATE

#### **Announcement by UNSD**

The Statistical Commission, at its thirty-seventh session held in March 2006 in New York, had a thorough discussion of the updating of the 1993 System of National Accounts (1993 SNA) under the agenda item "National accounts". The Commission had before it progress reports by the ISWGNA and

the Project Manager of the update. The conclusion was that the update process was moving ahead well in accordance with the approved timeframe and following the project management approach that had been recommended by the Commission at its previous sessions. The Commission welcomed

<sup>&</sup>lt;sup>1</sup> See the UN-ECE survey of some national practices of estimating the non observed economy: http://www.unece.org/stats/publications/non.observed.economy.pdf

ed.economy.pdf

<sup>2</sup> The ISWGNA comprises representatives of the five international organizations (UN, IMF, World Bank, OECD, European Commission) who have jointly published the international manual *System of National Accounts*, 1993 (1993 SNA).

<sup>3</sup> http://www.co.ed.org/document/40/0/2340 on 2640

the inclusion of a chapter on the measurement of the informal sector activities in the updated 1993 SNA. It noted the concerns on the treatment of unfunded pension schemes and the need for continuing consultation on the issue.

The conclusions reached by the Commission can be read in full in the report of the 2006

session of the Commission available both on the website of the Statistical Commission at http://unstats.un.org/unsd/statcom/sc2006.htm and on the SNA update website at http://unstats.un.org/unsd/nationalaccount/isw gna.htm. Additional information on the Commission's position and guidance regarding the SNA update process was published also in earlier issues of the SNA News and Notes.

### **UPDATING THE 1993 SNA By Anne Harrison, Editor of the Update of the 1993 SNA**

This article<sup>1</sup> provides a bird's eye view of some of the most interesting and significant changes that are being proposed by the Advisory Expert Group on National Accounts (AEG) in the 1993 SNA update. Change in the definition of financial services and measurement of FISIM is discussed in a separate article and therefore will not be mentioned here.

#### **Pensions**

The topic which has generated extensive discussions in countries with ageing populations is pensions: a highly charged political issue. This is especially so when it is government who bears the responsibility for the pensions funded on a pay as you go basis. Obviously, reasonable estimates of pension entitlements would be valuable but making robust estimates presents difficulties.

Some progress has been made though. For funded pension schemes, it is agreed the accounts should show the amount of liabilities the scheme has to the beneficiaries rather than, as now, the amount of funds available to meet these liabilities. Thus the question of over and under funded schemes is resolved. Further, greater precision can be given to the interpretation of pension contributions. What is payable by both employers and employees in a year represents the pension entitlement earned in a year. The property income distributed to the beneficiary and reinvested by him in the scheme represents the increase in the value of his personal entitlements because his retirement date is one year closer with every year that passes. It is agreed that the former is the correct basis for the determining the element of compensation of employees that represents the benefits of participating in a pension scheme, no matter what the nature of the scheme. For the pension supplement, it is agreed that this should apply to all private

schemes and to those public schemes which are explicitly funded and where the benefits are predetermined. Lively discussion continues on how to make estimates for unfunded schemes where it is the government who is responsible to provide the pensions. It is however increasingly clear that some latitude will be provided in the text for the extent to which such estimates, if made, will be incorporated in the core accounts.

#### Non-financial assets

In the light of developments since 1993, both in terms of data availability and increasing calls for the recognition of the capital nature of much R&D, it is proposed by the Canberra II Group and supported by the AEG that the data collected according to the Frascati manual be treated as expenditure on fixed capital.

An important recommendation is to include capital services in respect of assets used in production. This approach is particularly useful in the derivation of productivity measures and also shows how to resolve a number of issues peripheral to fixed capital measurement such as estimating the costs of ownership transfer and disposal costs. One consequence of this is to suggest again, as proposed in the 1993 revision, that the cost of capital should be added to the value of output of non-market producers.

A further insight emerged in the discussion on the measurement of intangible assets, both produced assets such as software copies and non-produced assets such as transferable leases. In such cases, an asset exists because factors intervene to cause a price differential between the price that would prevail in the market in the absence of any constraint and the price which is payable under the terms of the lease or license.

A detailed consideration of the role of contracts, leases and licences in the accounts has been completed and more comprehensive advice on how they are to be treated in the SNA will be given as compared to the present text.

#### Government

The period since 1993 has seen a surge of interest in the level of government debt, sometimes seen more widely as debt of the public sector. As a result of the harmonization of various manuals concerned with accounts for the government and public sectors, an entirely new chapter in the updated SNA will deal with this topic. Background work led to a refinement of the delineation of which institutional units are deemed to come under the control of government (particularly in respect of non-profit institutions mainly funded by government) and greater precision about the meaning of "economically significant prices".

A new development in the area of government accounts has been consideration of the impact of government guarantees to creditors. Some large guarantees are provided by means of financial derivatives but there are some important cases of loans where very many of the same type are issued. One example is in the case of export credits and another student loans. It has been decided that such cases should be treated in a manner similar to insurance since although the probability of any one loan defaulting is difficult to determine, a robust estimate can be made of the number of defaults in a cohort. Exceptional one-off loans will continue to be treated as at present with transactions recorded only when they eventuate or are deemed almost certain to do

One further government sector issue concerns schemes called variously public-private partnerships, private finance initiatives, build-own-operate-transfer schemes. The SNA, like the international accounting boards, is also wrestling with the problem, and is only able to offer general considerations given the experiences in different countries to be aware of rather than definitive rulings on appropriate treatments.

#### The rest of the world

The updating of the balance of payments manual and the SNA are being kept in step to ensure that the harmonization achieved with the last revision is kept in place. Besides a number of clarifications on terminology and extensions to new financial instruments, there are two important changes which will have repercussions on the national accounts both as regards international transactions and also domestic ones

At present both systems have conventions about when goods which move physically from one unit to another are recorded as being sold by the first unit and purchased by the second. In particular, interestablishment deliveries are treated as if there is a change in ownership when in fact there is not, both establishments belonging to the same enterprise. This becomes a major source of analytical confusion in the case of global manufacturing where goods are sent abroad for processing but no legal change of ownership takes place and no inflows or outflows of trade credits occur in respect of the value of the goods being processed. After extensive discussion, and the revelation that the present guidance in both manuals may be a source of confusion, it has been agreed to recommend a much simpler procedure to record transactions of goods based on the ownership principle. This will cause the total values of imports and exports to change, very significantly for some countries, but not the balance between them.

In the matching case of merchanting, when a unit in country A purchases goods from county B and sells them in country C, there is a change of ownership to country A but no physical movement of the goods. To include all goods bought by global wholesalers and retailers in a country's imports and exports would inflate these to a point where analysis would be compromised as countries appear to be exporting commodities which are never present in the country. It is therefore proposed that, by convention, such goods be recorded as negative exports on acquisition and positive exports on disposal. In some cases, inventories held abroad may need to be recorded when goods have been acquired in one period but will not be disposed of until a later period.

#### Units

The institutional unit is the fundamental building block of the SNA but developments in financial markets as well as those just referred to have led to the creation of new types of units which do not quite conform to the standard SNA paradigm of an institutional unit. In particular there are "units" which may exist legally, have balance sheets, but have neither physical presence nor any employees.



They should not be treated as institutional units unless they satisfy the criteria for qualifying as such. Non-resident units should always be classified as separate institutional units.

The revision of ISIC and its regional counterparts have implications for the SNA that led to a revision in the treatment of holding companies. In future a holding company will refer to only the passive holding vehicle, while the unit carrying out management and control functions will be classified as providing management services. One consequence is that the head office of a banking complex may be designated a non-financial institution.

#### **Developing country concerns**

A determined effort is being made to ensure that some topics of special concern to developing countries are given suitable attention. These include the role of migrant workers and international remittances, the role of NPIs and in particular their role in major international relief efforts, the informal economy and its implications for informal production and informal employment, the implications of debt concessionality and debt restructuring.

#### The new publication

The first 13 chapters of the SNA will be recognizably the same, though updated as necessary for the changes accepted. More extensive description of new material will mainly appear in new chapters explaining the key features and uses of sector accounts, public and government sector, NPIs linking to NPI satellite accounts and the informal economy. The rest of the world chapter will be revised to link to the revision of the balance of payments manual and another chapter will provide a link to monetary and financial statistics. There will be an extended chapter on population and labour inputs including measurement of employment and hours worked. For the first time there will be a chapter mentioning that national accounts are usually presented as time series in both current prices and volume terms and discussing the basic identities concerning GDP, GNI and other key macro-aggregates. In order to accommodate these expansions, some material of relevance in limited circumstances will be placed electronic annexes.

http://www.iariw.org/papers/2006/harrison.pdf

### FINANCIAL INTERMEDIATION SERVICES INDIRECTLY MEASURED (FISIM) By Herman Smith, UNSD

The recommendation by the Advisory Expert Group (AEG) on National Accounts on the update of the 1993 SNA on how financial services indirectly measured should be calculated represents a change from the current recommendation of the 1993 SNA. The aim of this note is to give a brief background on the issue and to discuss some practical implications of the proposed methodology.

Financial corporations may provide intermediation services for which they do not charge explicitly. They are able to defray their expenses and have an operating surplus by charging interest rates on the funds they lend that are higher than the rates they pay on the funds they borrow. These intermediation services are indirectly measured, which are called financial intermediation services indirectly measured (FISIM) (1993 SNA paragraph 6.122-124).

The 1993 SNA defined the value of FISIM as "the total property income receivable by financial intermediaries minus their total interest payable, excluding the value of any property income receivable from the investment of their own funds, as such income does not arise from financial intermediation" (paragraph 6.125).

At the January 2006 meeting of the AEG the paper "The production of financial corporations and price/volume measurement of financial services and non-life insurance services" was discussed. The paper argues that the rapid development on financial markets over recent years has significantly changed the way in which financial corporations are managed and operated. In this respect, financial corporations provide, in addition to the intermediation activities, "financial risk management" and



<sup>&</sup>lt;sup>1</sup> Based on a longer paper presented by the author at the 2006 IARIW conference and available at

Moreover, financial services are also provided by units that are making loans exclusively from own funds. It makes no difference where the funds come from; the service implicit in the granting of a loan funded by deposits is indistinguishable from the service associated with a loan funded by own funds or securities. If a financial institution issues securities in order to make loans, it may be engaged in intermediation but the only indirect services produced are those provided to its borrowers.

The AEG recommends that, indirectly measured financial services should be calculated independently on loans and deposits by making use of a reference rate. These services will comprise two elements, those which arise from intermediation, as presently understood, and those which arise from lending from sources other than intermediated deposits. The intermediation process remains as defined in the 1993 SNA (4.78) "...to channel funds from lenders to borrowers by intermediating between them". But this is no longer the only source of services associated with lending by financial institutions.

In the case where intermediation takes place from deposits to borrowers only, FISIM (on loans  $(f_L)$  and on deposits  $(f_D)$ ) can be derived according to the 1993 SNA principle as interest receivable  $(R_L)$  less interest payable  $(R_D)$  (property income receivable other than interest is not relevant in this case). Interest receivable  $(R_L)$  is equal to the stock of loans  $(Y_L)$  multiplied by the interest rate on loans  $(r_L)$  and interest payable  $(R_D)$  is equal to the stock of deposits  $(Y_D)$  multiplied by the interest rate on deposits  $(r_D)$ .

$$f_{L} + f_{D} = R_{L} - R_{D} \tag{1}$$

$$f_{L} + f_{D} = r_{L}Y_{L} - r_{D}Y_{D}$$
 (2)

The AEG defines FISIM as equal to the stock of loans  $(Y_L)$  multiplied by the difference between the interest rate on loans  $(r_L)$  and a reference interest rate (rr) plus the stock of deposits  $(Y_D)$  multiplied by the difference between a reference interest rate (rr) and the interest rate on deposits  $(r_D)$ .

$$f_{L} + f_{D} = (r_{L} - rr)Y_{L} + (rr - r_{D})Y_{D}$$

$$(3)$$

$$f_{L} + f_{D} = rr(Y_{D} - Y_{L}) + r_{L}Y_{L} - r_{D}Y_{D}$$
 (4)

Equations 2 and 4 show that FISIM derived by the two formulas is the same when the stock of loans  $(Y_L)$  is equal to the stock of deposits  $(Y_D)$  as in the case of basic intermediation where all deposits received are used by banks to provide loans to borrowers and loans are only provided from deposits. This comparison also indicates that pure interest receivable by depositors is only equal to that payable by borrowers in the case where the stock of loans and deposits are equal.

Increasingly developments on financial markets create a mismatch between the stock of deposits and loans. Deposits are not only used to provide loans but may be used to acquire a wide range of assets. On the other hand, deposits are not the only source in the provision of loans, and own funds and other financial liabilities such as debt securities can also be used.

The assumptions that the financial institutions provide indirect services only when intermediating between depositors and borrowers and that pure interest receivable from borrowers are fully transferred to depositors are therefore no longer applicable.

The new methodology, assumes that implicit service charges are generated from loans and deposits only. It has the advantage that services provided to depositors and borrowers are independently estimated irrespective of what the deposits are used for or where the funds for providing loans came from. Moreover, this approach facilitates the distribution of the indirect service charges to its users in a consistent way, by allowing calculations at a detailed level.

The formula recommended by the AEG to calculate indirect service charges independently on loans and deposits by making use of a reference rate is as follows:

$$(\mathbf{r}_{1} - \mathbf{r}_{1})\mathbf{Y}_{1} + (\mathbf{r}_{1} - \mathbf{r}_{1})\mathbf{Y}_{1} \tag{5}$$

Where units are lending exclusively from own funds they generate financial services measured by the formula:

$$(\mathbf{r}_{L} - \mathbf{r}\mathbf{r})\mathbf{Y}_{L} \tag{6}$$

The AEG did not prescribed which rate to use as a reference rate in the compilation of indirectly measured financial services, but recommends that it should be a rate that has no service element in it and which reflects the risk and maturity structure of the financial assets and liabilities to which indirect service charges applies. The AEG agreed that a single reference rate should be used but, when relevant, a country could choose to use multiple rates. It is recommended that different reference rates should be used for transactions in other currencies.

However, a simple way to obtain a reference rate that reflects the maturity structure of the financial assets and liabilities is to calculate the average of the sum of the ratio's of interest payable and receivable to the stock of deposits and loans respectively as shown in equation (7)<sup>1</sup>. This formula can also be used for loans and deposits in foreign currencies.

$$rr = 0.5 \left( \frac{R_D}{Y_D} + \frac{R_L}{Y_L} \right) \tag{7}$$

The paper "The production of financial corporations and price/volume measurement of financial services and non-life insurance services" can by found on the UNSD website at http://unstats.un.org/unsd/nationalaccount/AEG/papers/m4FinancialServices.pdf and the response by the AEG on the recommendations of the paper in the Short report of the January 2006 meeting of the AEG at http://unstats.un.org/unsd/nationalaccount/AEG/papers/m4Conclusions.pdf on page 26. The recommendations of the AEG on financial services are also reflected in the draft Full set of provisional recommendations (FSPR) page 28 on the UNSD website at

http://unstats.un.org/unsd/nationalaccount/AEG/recommendations/flpr.pdf

## THE WEBSITE OF THE 1993 SNA UPDATE – PROMOTING TRANSPARENCY, ACCESSIBILITY AND GLOBAL PARTICIPATION By Annette Becker, UNSD

In line with the Statistical Commission's emphasis on the transparency of the 1993 System of National Accounts (1993 SNA) update project and the broadest possible involvement of the international statistical community, the Intersecretariat Working Group on National Accounts (ISWGNA) initiated the creation of a website. The transparency, accessibility and informative character of the website, developed and maintained by UNSD, have now been recognized through the large number of its visitors, the feedback and, most importantly, the acknowledgement by national statistical

offices and international agencies expressed in the annual reports of the Statistical Commission since the update process was initiated.

For the benefit of those who are not yet familiar with this website or have not taken advantage of this tool to follow developments in the updating of the 1993 SNA, the project's website "Towards 1993 SNA, Rev.1" can be found at

http://unstats.un.org/unsd/nationalaccount/snar ev1.asp. It contains all relevant documents in reference to the project management, as well



<sup>&</sup>lt;sup>1</sup> The endogenous reference rate approach is probably more suitable for countries with less detailed data and should be carefully evaluated to ensure that the result is appropriate. Ideally only intermediated loans (such as loans provided by banks) should be used in the calculation to avoid questionable results.

as links to all papers and reports from meetings of the Advisory Expert Group on National Accounts (AEG), as a reflection of the AEG's key role in making recommendations on the treatment of the issues under consideration. The reference to the list of all issues identified for update, together with a brief description, AEG recommendations and comments made by experts, national statistical offices and central banks are also displayed on the website.

The advantages of this web-based approach are the following: all information is publicly accessible to everyone; references (links) to all available information are combined in one location; updates, changes and new developments are incorporated as soon as they occur; documents are posted as soon as they are available; users are immediately alerted of new developments on the website; users decide what information to access or download.

Since the update of the 1993 SNA is an ongoing process, the project website has to be constantly updated and expanded until the submission of the *System of National Accounts* 1993, Revision 1 to the Statistical Commission for consideration of its approval in 2008. The recent creation of a webpage on the consistency issues is just one example of the newest additions. Another example is the launch of a webpage to support the drafting

and review phase presenting the newly drafted text of the *System of National Accounts 1993, Revision 1*.

Another useful feature of the website is the column "What's New?" on the main page announcing all newly posted information, together with the date of the posting. Each announcement is shown for 30 days, after which it will disappear automatically. This way the user can easily identify new information not previously shown.

The thirty-seventh session of the Statistical Commission, by acknowledging the usefulness of the website as a means of supporting transparency, accessibility and involvement in the update process, recognized a number of contributors in addition to the role of UNSD as the organization hosting this webpage. The AEG, ISWGNA, the project manager and editor and representatives of the UN regional commissions' statistical services all contributed and continue to oversee and provide inputs for the content of this website. Further, national statistical offices and central banks from about 100 countries contributed in the form of comments in the consultation process on the AEG recommendations. These contributions, as well as comments from other institutions and individual experts in national accounts added to the richness of the content of this website, as the Statistical Commission highlighted when it commended the website.

#### MEETINGS AND SEMINARS

25-28 April 2006: Joint UNECE/OECD/Eurostat Meeting on National Accounts and update of SNA, Geneva, Switzerland

10-12 May 2006: Joint UNECE/ILO Meeting on Consumer Price Indices, Geneva, Switzerland

15-17 May 2006: Meeting of the Paris Group on Labour and Compensation Statistics, Budapest, Hungary

22-24 May 2006: User-Producer Conference: Water Accounting for Integrated Water Resource Management, Voorburg, the Netherlands

31 May – 1 June 2006: Joint Meeting of the Canberra II Group on Non-Financial Assets and the group of National Experts on Science and Technology Indicators (NESTI), Berlin, Germany



19-21 June 2006: Meeting of the London Group on Environmental Accounting, New York, USA

22-23 June 2006: First Meeting of the UN Committee of Experts on Environmental - Economic Accounting (UNCEEA), New York, USA

19-23 June 2006: Technical subgroup on classifications, New York, USA

13-14 July 2006: Seminar on the Creation, Recognition and Valuation of Intellectual Assets, New York, USA

28-30 August 2006: Workshop on 1993 SNA Updating, Santiago, Chile

9-13 October 2006: OECD Meeting of National Accounts Experts, Paris, France

30 October – 1 November 2006: Regional Workshop on Use of Administrative Data in Economic Statistics, Moscow, Russian Federation

19 -21 December 2006: ESCWA regional workshop on National Accounts, Cairo, Egypt.

#### **Editorial Note**

SNA News and Notes is a bi-annual information service of the ISWGNA prepared by United Nations Statistics Division (UNSD). It does not necessarily express the official position of any of the members of the ISWGNA (European Union, IMF, OECD, United Nations and World Bank).

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The 1993 SNA with search capability, national accounts glossary, handbooks on national accounts and activities and reports of the ISWGNA can be accessed on the internet: http://unstats.un.org//unsd/sna1993/introduction.asp

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