SNA News

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STATISTICAL COMMISSION ADOPTS THE UPDATED 1993 SNA VOLUME 1 By ISWGNA

At its thirty-ninth session held in February 2008, the Statistical Commission adopted, in principle, Volume 1 of the updated SNA as the international standard for national accounts statistics and encouraged Member States, regional and international organizations to implement the standard, including for national and international reporting. Since the time to evaluate Volume 1 of the updated SNA as a whole was insufficient, an additional twomonth period is available, until end of April, for completing the review to examine the conceptual coherence and consistency of the System with the adopted recommendations. During the same period ISWGNA will also seek the opinion of Member States on the preferences for the title of the updated SNA.

After taking into account the substantive observations and approval by the Bureau of the Commission, the Intersecretariat Working Group on National Accounts (ISWGNA) will proceed with the finalization and publication of Volume 1, in pre-edit electronic and paper versions to be followed by official editing and subsequent publication in the official languages of the United Nations.

The Commission expressed appreciation for the dedicated hard work leading to the submission of Volume 1 and the significant contributions of the AEG, ISWGNA organizations, the Project Manager Ms. Carol Carson and the Editor Ms. Anne Harrison, and acknowledged the countries for their active participation in the global consultations.

Concerning the work ahead on draft chapters of Volume 2 of the update of the 1993 SNA, comprising interpretations of the accounts and extensions such as satellite accounts, it requested the ISWGNA to take appropriate measures to ensure that Volume 2 is duly completed and presented for adoption in 2009.

With regard the **SNA** to implementation, the strategy in the context of development cooperation should take account of the inputs from the May 2008 joint Eurostat/UNSD conference on national accounts and other inter-governmental and regional meetings elaborating on relevant action plans. It was emphasized that the detailed strategy should reflect the need for regional and sub-regional coordination, given the different levels of statistical development, and elaborate on the advocacy strategy to engage users, especially those involved in policy formulation and analysis.

In light of the above decisions made by the Statistical Commission, the ISWGNA in the coming months will remain focused on the finalization and publication of Volume 1 of the updated 1993 SNA while continue working on the draft chapters of Volume 2 and planning the implementation. In this period Mr. Paul McCarthy will assume the function of project manager.

INTRODUCTION OF THE UPDATED SNA BY OECD COUNTRIES AND THE QUANTITATIVE IMPACT OF CHANGES ON GDP By Charles Aspden, OECD

Background

It is quite clear that over the last 15 years the way in which the economy works has changed quite substantially. The increasing role of information and communication technologies in production processes, the growing role of intangible assets and services activities, the expansion of financial services, the globalization of national economic systems and reforms in the management of the "welfare state" have produced radical changes in several respects. These changes require adjustments in the way in which statistics are compiled, both in the classifications and the theoretical frameworks used to run statistical surveys and produce macroeconomic statistics.

The update of the System of National Accounts, 1993 (1993 SNA) has been undertaken to respond to these changes and bring this pre-eminent international statistical standard into line with the new economic environment, advances in methodological research and the needs of users. In 2003 the United Nations Statistical Commission officially called for an update of the 1993 SNA that would not bring fundamental or comprehensive changes to the System and would ensure consistency with related statistical manuals. The outcome of the revision process is the adoption by the Statistical Commission of Volume 1 of the updated SNA in 2008 and the expected adoption of Volume 2 in 2009. Although the implementation of the updated SNA will be gradual and several OECD member countries will not implement some of these changes for many years, it is important to understand what the revised system will look like and what impact the changes will produce on key economic variables, such as Gross Domestic Product (GDP), public deficit and debt, etc. This article highlights some of the possible impacts of the main changes on the key variables.

The national accounts provide a systematic statistical framework for an economy and its analysis. While complete balance sheets are compiled by relatively few countries, most OECD member countries have complete data for financial assets, fixed assets and liabilities. Most OECD member countries also produce these statistics for some, or all, major institutional sectors as well as the economy as a whole. Production, consumption, capital formation, exports, imports and stocks of fixed assets have price and volume dimensions, and so volume and price indices can be compiled for these statistics. Volume estimates are used to measure growth and so volume estimates of GDP and its major components are the most commonly used national accounts statistics. Although GDP is not a measure of well-being. the volume measure of GDP per capita is often used as a surrogate.

Updating the SNA cannot be taken lightly. Any changes must be conceptually sound and consideration must be given to the feasibility of implementation around the world. To maintain international comparability, changes must also have wide international support. Therefore, from the start the broadest possible involvement of the global statistical community in the update project has been ensured.

The bulk of the update process has focused on the 44 substantive issues and the 39 matters for clarification that were identified in the first phase of the update. The recommendations made concerning them cut across almost all parts of the SNA, 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 globalized 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.

Introduction of the updated 1993 SNA by OECD countries

A number of significant changes were made with the development of the 1993 SNA and because some of them were implemented quite differently countries. international by comparability suffered. Such was the case for computer software. The 1993 SNA, unlike its predecessor, recognizes software as an asset if it meets the general definition of an asset. When they adopted the 1993 SNA, OECD countries employed quite different means to estimate the value of capital expenditures on software in both current prices and volume terms, and it was only in 2002 that an OECD task force was set up to develop guidelines. The lesson has been learned, and work has already begun on updating the guidelines for software and developing new guidelines for the measurement of capital expenditures on R&D. These, along with guidelines concerning capital expenditures on mineral exploration and evaluation and entertainment, literary and artistic originals are to be incorporated in a OECD handbook on measuring new intellectual property products. Likewise, the revised OECD manual Measuring Capital will provide comprehensive guidance on the measurement of capital services and related statistics.

In 2006 the OECD conducted a survey of OECD member countries to determine when they expected to introduce the changes in the updated 1993 SNA, and adopt the International Standard Industry Classification Rev. 4, or their national or regional version of it. The switch to ISIC Rev. 4 is a major undertaking for many countries and its implementation affects when countries will adopt the updated 1993 SNA. Some prefer to introduce the two together while others prefer to do them separately. Many national statistical offices (NSOs) compile their national accounts using supply and use tables and/or input-output tables, which are an important tool for compiling consistent and accurate national accounts, as well as having many other uses, such as productivity analysis. The changes to the two standards will mean recompiling these tables for at least a few years, if not the entire time series. Whatever they do, most OECD NSOs will endeavour to

provide consistent and continuous time series to the extent they are able.

The advantages of adopting the two revised standards together are that there is only one major change for users to deal with and there is no duplication of effort in implementation. The disadvantage is that it is a lot of work for a NSO to do all at once. The EU countries are to make the two changes separately. They have decided to implement NACE Rev. 2 in 2011, and it is proposed to adopt the revised European System of Accounts in 2011, but not implement it in releases until 2014. Neither of the last two dates is firm. The need for coordination and comparability in EU national accounts is most important because they are used for administrative purposes, such as determining each country's contribution to the EU budget. This is the raison d'être for the ESA, which provides a "cookbook" for EU countries to follow. But it all takes time to develop, legislate and then implement. It is likely that the non-EU European countries will follow the EU timetable.

The non-European OECD member countries have indicated quite different dates.

- Australia has indicated its intention to introduce most of the changes in the updated SNA in late 2009, along with the "Australian New Zealand Standard Industry Classification (ANZSIC), 2006".

- Canada intends to introduce all the changes in the updated SNA in 2012 and NAICS 2007 in 2010.

- The US has already implemented some of the changes, namely the extension of the asset boundary to all military expenditures of a capital nature and the use of expected claims in the measurement of output of non-life insurance services. It intends to introduce the remainder progressively. The biggest change in terms of its complexity and impact on GDP is the capitalization of R&D. This has been provisionally scheduled for inclusion in the core accounts in 2012/2013 (a satellite account is well underway now). Several other major changes will probably be introduced in 2012/13, but some of the other changes may be introduced at other times. NAICS 2007 will be introduced in the national accounts in 2010.

- Korea has a tentative plan to adopt the updated SNA in 2014, at the same time it

adopts the revised "Korean Standard Industry Classification".

- Japan has not made firm plans, but the likely timing is the adoption of both the updated SNA and the revised "Japanese Standard Industry Classification" in 2015.

- Mexico intends to adopt the updated SNA in a staggered fashion. The proposed changes concerning some issues, such as pension schemes, non-performing loans and guarantees, could be introduced in the medium term, while those relating to the capital formation of non-financial assets are likely to be introduced later. No decision has yet been made on specific dates for making these changes. Mexico plans to introduce NAICS 2002 (which is only a little different to NAICS 2007) in 2007.

- New Zealand has not yet developed a schedule for adopting the updated SNA, but it intends to introduce all the changes at the same time. It has tentative plans to introduce ANZSIC 2006 in either 2010 or 2011.

An important expected outcome of the adoption of the revised industry classifications is much greater comparability between country industry data. A majority of OECD countries intends to implement the new ISIC (or national/regional forms of it) by 2011. Thus, the OECD intends to implement a new questionnaire, using the new SNA ISIC aggregations (A10 and A38 levels) in 2011, in coordination with Eurostat.

Quantitative impact of some of the most important changes

The changes in recommendations are described in detail in documents related to the 1993 SNA update and in the finalized chapters of Volume 1 of the updated 1993 SNA available at the project's website at http://unstats.un.org/unsd/nationalaccount/snarev1. asp The remainder of this article considers the expected quantitative impacts of some of the changes.

Pension schemes

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It is not possible at the moment to quantify the impact on the accounts of these changes. The impact is likely to vary considerably between countries and depend on the composition of the different types of schemes within a country, the current treatment and the extent to which the recommendations are implemented in the core accounts in respect of government employer schemes. Compensation of employees and household saving could change (probably upwards) and gross operating surplus could change (probably downwards).

If government liabilities are recognized for unfunded employer defined benefit schemes for government employees then the ratio of the SNA public debt to GDP could rise substantially, maybe by between 20% and 80% in OECD countries. The impact on GDP and the SNA measure of public deficit will depend on whether the actual pension payments currently included in compensation of government employees are greater or less than the imputed contributions to the pension fund plus the imputed interest on previously unpaid contributions that will replace them when the change is implemented. Some non-EU countries, such as Australia and Canada, have already made this latter change.

Research and experimental development

The impact on GDP of the capitalization of R&D depends on the relative size of R&D production to GDP, if and when implemented. An approximate indicator of what this is likely to be is the ratio of gross domestic expenditures on research and development (GERD) to GDP. The value of this ratio varies considerably between OECD member countries. In 2006, or the latest year, the ratio varies from about 0.5% for Greece to a little under 4 % for Sweden - with the OECD average being 2.3%. The ratios do not change very quickly over time, which suggests that the capitalization of GDP will have little impact on GDP growth rates.

A word of caution is needed because the GERD to GDP ratio is only an approximate indicator of the impact of the capitalization of R&D on GDP for three reasons. First, there are conceptual differences between GERD and the national accounts measure of R&D production. Second, expenditures on R&D are already included in the output of non-market producers because output is measured by summing costs. However, R&D assets will incur consumption of fixed capital (depreciation) and so the gross value added, but not the net value added, of non-market producers will be boosted by the

consumption of past R&D capital formation. In a growing economy the consumption of past R&D capital formation will be generally less than current expenditures on R&D. Third, it is likely that some expenditure on R&D by government and non-profit institutions will not be recorded as capital formation. Hence, the **impact on GDP can be expected to be a little less than the GERD to GDP ratio suggests**.

Military expenditures

The change to the treatment of weapons systems will boost GDP level by an amount equal to the consumption of fixed capital of weapon systems, and this will vary considerably between countries. The US has already adopted the change, and this adds about 0.5% to US GDP.

Goods for processing

In principle this change will have no impact on GDP. The change will lead to lower estimates of output and intermediate consumption, but the reduction will be the same and so there will be no change to industry gross value added. Exports and imports will also be reduced by the same amount, and the reductions could be relatively large for some countries.

Merchanting

The impacts of the change in the treatment of merchanting are opposite to those for goods for processing. But as for goods for processing, this change will have no impact on GDP, in principle, Estimates of output and intermediate input will be increased by the same amount. Exports and imports of merchanted goods will be recorded. However, imports of merchanted products will be recorded as negative exports, and so in aggregate, export and imports will be unaffected.

Output of non-life insurance services

A number of recommendations have been made to improve the recording of output of insurance, most importantly using adjusted (or expected) claims in the algorithm to calculate output. This will result in less volatile and more meaningful estimates of output, but it will also mean that net premiums receivable and adjusted claims due will generally no longer be equal in a period.

Conclusions

It is likely that most OECD countries will implement most of the changes over a five or six year period, starting at the end of 2009. It is expected that as countries adopt the new SNA 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 for a number of years, but it is unlikely that any of the changes will have much impact on GDP growth rates.

This article has summarized the expected impact of some of the most important changes. Only a few of the changes will have an appreciable effect on GDP and other major aggregates. It is unclear whether the change with potentially the biggest impact on GDP, the capitalization of R&D, will be actually introduced in the core accounts of many countries, and if it is, when. However, most OECD countries will at least compile R&D satellite accounts which could support international comparisons.

The OECD will work over the next few years both on the preparation of implementation manuals and on the continuous assessment of data comparability. Users will be informed about the progressive adoption of the updated 1993 SNA with appropriate metadata.

REPORTING OF NATIONAL ACCOUNTS DATA TO THE UNITED NATIONS STATISTICS DIVISION By UNSD

Recently there has been a significant improvement in the availability, scope and compliance of official national accounts data reported to the United Nations Statistics Division.

Introduction

In accordance with a request from the United Nations Statistical Commission, the United Nations Statistics Division (UNSD) regularly evaluates the conceptual compliance of official national accounts data reported to the UNSD with the recommendations of the 1993 System of National Accounts (1993 SNA). In addition, the availability and scope of the national accounts data are also evaluated. This article presents a summary of the most recent assessment of this kind.

The assessment is based on the national accounts data reported annually by UN Member States, in response to the United Nations National Accounts Questionnaire (UN-NAQ). The data are either reported directly to the UNSD, or are provided by the United Nations Economic Commission for Europe (UNECE), the Organisation for Economic Cooperation and Development (OECD), and the Caribbean Community Secretariat (Caricom) on behalf of their Member States.

Conceptual compliance

An analysis of the national accounts data reported by countries in the period 2002 to 2006 shows that 110 countries implemented the 1993 SNA methodology (see Table 1, column b). In addition to the 57 developing countries (19 of them African countries, 15 countries from Latin America and the Caribbean and 23 from Asia and Oceania), nearly all developed and transition economies reported national accounts data according to the 1993 SNA methodology. Taking into account those developing countries that reported to the UNSD, about 60 per cent of countries in Africa and Asia, 50 per cent in the Caribbean and Latin America and 18 per cent in Oceania compile data according to the recommendations of the 1993 SNA.

Response rates

Based on replies in the last five reporting periods, at least 84 per cent (162 countries) of the UN Member States are able to prepare and report national accounts data (Table 1, column e). Even for developing countries, in regions other than Africa, almost 90 per cent reported national accounts data to the UNSD. For Africa, the response is somewhat lower, 20 out of 53 countries did not report national accounts data.

Compared to the 2005 UN-NAQ, replies to the 2006 UN-NAQ showed a significant The number of responses improvement. increased from 113 countries in the 2005 reporting period to 135 countries in the 2006 reporting period; an increase of 19 per cent (see Table 1, column g to j). The higher response rate can be attributed to an increase in the responses from developing countries, especially African countries where the number of responses nearly doubled (14 to 25 countries). The responses from Latin America and the Caribbean, and the Asian region also increased strongly, with 79 per cent of these countries reporting to the 2006 UN-NAQ. The majority of the countries that did not respond to the 2006 UN-NAQ are Least Developed Countries (LDC) or Small Island Developing States (SIDS).

Despite the improvement in the response rates, some countries and regions are still facing difficulties in reporting national accounts data to the UNSD on a timely basis (see Table 1, column n). Taking into account the reporting of national accounts data with a time lag of only one year, 64 per cent of UN Member States are in compliance. However, only 38 per cent of African countries and 25 per cent of Oceania compared to 54 per cent of developing countries as a whole, are able to report national accounts data with a lag of not more than one year.

	Number of Total countries number that		Percent	Number of countries that replied to	Percent	Compli- ance to 1993 SNA of those that reported	Num- ber of count- ries that	Percent	Number of countries that	Percent	Percent- age change	Latest year of available data reported by countries as percentage of total number of countries		
	of countries	imple- mented 1993 SNA	of total	UN-NAQ once between 2002-2006	of total	once between 2002-2006 in per cent	replied to UN- NAQ in 2005	of total	replied to UN-NAQ in 2006	of total	from 2005 to 2006	2005	2006	Reporting with a lag of not more than one year
	а	b	с	d	e	f	g	h	i	j	k	1	m	n
UN Member States	192	110	57	162	84	68	113	59	135	70	19	31	33	64
Developed	37	34	92	36	97	94	35	95	36	97	3	32	62	94
Transition economies	19	19	100	19	100	100	16	84	16	84	0	32	53	85
Developing	136	57	42	107	79	53	62	46	83	61	34	31	23	54
Africa	53	19	36	33	62	58	14	26	25	47	79	23	15	38
Caribbean and Latin America	33	15	45	29	88	52	20	61	26	79	30	42	33	75
Western Asia	14	6	43	13	93	46	11	79	11	79	0	50	14	64
Eastern, Southeastern, Southern Asia	24	15	63	21	88	71	15	63	19	79	27	33	33	66
Oceania	12	2	17	11	92	18	2	17	2	17	0	8	17	25

Table 1 - Conceptual implementation of the 1993 SNA and timeliness of reporting

Table 2a: The 2006 reporting period														
	Total – number of countries	Tables of the Minimum Requirement Data Set						Six or		Milestone level				
		1.1	1.2	2.1	2.2	2.3	1.3/ 4.1	4.2	more tables	Seven tables	1 or higher	Percent of total	2	Percent of total
UN Member States	192	151	128	154	149	108	131	78	100	71	148	77	129	67
Developed	37	36	35	35	33	34	35	30	33	29	35	95	35	95
Transition Economies	19	18	14	19	18	10	14	11	11	10	18	95	14	74
Developing	136	97	79	100	98	64	82	37	56	32	95	70	80	59
Africa	53	30	27	31	29	19	24	12	16	12	29	55	23	43
Caribbean and Latin America	33	28	21	28	29	20	26	12	18	12	28	85	26	79
Western Asia	14	13	10	13	12	13	12	3	9	2	13	93	12	86
Eastern, Southeastern, Southern Asia	24	21	18	20	20	10	16	8	11	5	21	88	16	67
Oceania	12	5	3	8	8	2	4	2	2	1	4	33	3	25

Table 2 The scope of national accounts data reported to the UNSD

	Total – number of countries	Tables of the Minimum Requirement Data Set							Six or		Milestone level			
		1.1	1.2	2.1	2.2	2.3	1.3/ 4.1	4.2	tables	Seven tables	1 or higher	Percent of total	2	Percent of total
UN Member Countries	192	132	109	135	129	98	114	65	88	59	131	68	113	59
Developed	37	35	34	35	33	32	33	26	31	25	35	95	33	89
Transition Economies	19	18	13	19	18	10	11	10	10	10	18	95	11	58
Developing	136	79	62	81	78	56	70	29	47	24	78	57	69	51
Africa	53	19	17	21	19	14	16	7	11	7	19	36	16	30
Caribbean and Latin America	33	25	19	24	24	18	24	11	17	10	25	76	24	73
Western Asia	14	12	9	13	12	12	11	2	7	1	12	86	11	79
Eastern, Southeastern, Southern Asia	24	18	14	17	17	10	15	7	10	5	18	75	15	63
Oceania	12	5	3	6	6	2	4	2	2	1	4	33	3	25

Availability and scope of national accounts data

The scope of national accounts implementation is evaluated against a standard "minimum requirement data set" (MRDS)¹, adopted at the thirty-second session of the Statistical Commission in 2001, and against the "milestones²" measure, adopted at the twenty-ninth session of the Statistical Commission in 1997. The MRDS and the milestones both evaluate the scope of the SNA implementation according to the particular tables submitted to the UNSD.

Table 2 shows the availability and scope of official national accounts data reported to the UNSD according to the MRDS tables for the reporting periods 2005 and 2006 respectively. Table 2a reflects data reported in the 2006 reporting period for the years 2002 to 2006 and Table 2b reflects data reported in the 2005 reporting period for the years 2002 to 2005. The MRDS tables clearly indicate that there was a significant improvement in the availability and scope of national accounts data reported to the UNSD in the most recent reporting period. A preliminary assessment for the 2007 reporting period, which is not completed yet, indicates that this trend is continuing.

In terms of the coverage of the national accounts data reported, the total number of countries that provided 6 or more tables of the MRDS increased from 75 (39 per cent of the UN Member States) to 100 countries (representing 52 per cent of the UN Member States). The number of countries that provided 7 tables of the MRDS increased from 52 (27 per cent of the UN Member States) to 71 countries (37 per cent of the UN Member States). These countries are able to provide parts of the integrated economic accounts for the total economy and the rest of the world, in

addition to gross domestic product by expenditure and industry, at current and constant prices; output, value added and gross capital formation by industry; and relations among product, income, saving and net lending/borrowing.

The benchmark of milestone 2 was observed by almost all developed countries and about 80 per cent and higher for developing countries in Western Asia and in Latin America and the Caribbean. For African countries that report data, almost 70 per cent met milestone 2. With this milestone, a reporting country provides at least value added by industry and gross domestic product by expenditures, either in current or constant prices, and gross national income.

Conclusion

The improvement in the reporting of national accounts data to the UNSD in recent years can be attributed to a higher response from developing countries, especially Africa, as almost all developed countries already report national accounts data. Taking into account the results of the last five data reporting periods, the majority of countries are also able to compile national accounts data according to the 1993 SNA, although not all are able to report on a timely basis. Α preliminary assessment for the 2007 reporting period, which is not completed yet, indicates that the improvement in the reporting of national accounts data to the UNSD is continuing.

MANUALS AND HANDBOOKS

For reference to a list of manuals planned by member organizations of the ISWGNA as part of the SNA implementation process in the medium term, presented as background document to the Fifth Advisory Expert Group Meeting (March 2007, New York) see http://unstats.un.org/unsd/nationalaccount/AEG/papers/m5plannedManuals.pdf

¹ Report of the ISWGNA to the thirty-second session of the UNSC, document E/CN.3/2001/8.

² Report of the ISWGNA to the twenty-ninth session of the UNSC, document E/CN.3/1997/12.

MEETINGS AND SEMINARS

6-8 May 2008: Joint Eurostat - UNSD Conference on Outreach and Coordination in National Accounts, Luxembourg http://epp.eurostat.ec.europa.eu/portal/page?_pageid=2313,68881303&_dad=portal&_schema=PO RTAL

7-9 May 2008: Joint UNECE-ILO Meeting on Consumer Price Indices, Geneva, Switzerland

26 May – 13 June 2008: 2nd Regional Course on Integrated Economic Accounts by SIAP, Manila, Philippines

2-4 July 2008: Second Meeting of the African Group on National Accounts, Tunis, Tunisia

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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