



Balancing the Needs of Future SNA Revisions with the Resources of National Statistical Offices

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Abstract

This conference will focus on the “main challenges in compiling national accounts, now and in the future.” Past SNA revisions have generally resulted in changes needed to improve the relevance of the accounts. However, the processes used to select changes do not directly incorporate information on the ability of national statistical offices to implement a change.

The latest available information on SNA revision implementation compiled by the United Nations Statistics Division indicates that ongoing efforts by international organizations have been only partially successful in achieving full compliance by all countries. In addition, this information does not cover either the reliability of the resulting estimates or the timeliness of the source data and methods to be used to implement the changes.

Studies into the problems of implementation indicate that the reasons include inadequate funding, inadequate technical resources, and lack of user interest in some of the changes. With regard to the funding problem, recent experiences with socio-economic household surveys in Australia, the United Kingdom, Canada, and United States indicate that there are funding problems for all types of key statistical programs.

This paper will examine the idea that the SNA revision process should be expanded to include a “cost-benefit” analysis similar to the formal cost-benefit analysis now used in the United States for evaluating new government regulations. The paper will examine three of the key changes incorporated into the most recent SNA data and consider whether the revised accounts may have reduced international comparability.

Background

1. This paper resulted mainly from the author’s interest in several aspects of the “virtual” U.S. statistical system – implementation of SNA revisions, measurement of

national accounts, funding of statistical programs, and user input into the statistical system.

2. For example, the United States, like most countries, has adopted many but not all of the key 1993 and 2008 SNA revisions (or underlying concepts from the 1968 SNA). This is not surprising given that Paragraph 1.5 of the 2008 SNA reminds us that “In practice, priorities can only be established country by country by economic analysts or policymakers familiar with the particular economic situation, needs and problems of the individual countries in question.” Looking at how other countries are adopting the 2008 SNA raises concerns that international comparability may have decreased and not increased. Although there is extensive information on implementation from international organizations, it does not provide sufficient detail to make that determination. In addition, if implementation is accomplished using less than reliable source data, we may be seeing a decrease in the quality of our quarterly national accounts at the very point in time where governments and central banks around the world are basing key policy decisions on these measures.

3. As for funding for statistical programs, it is clear that times have never been good for increased funding and that the situation is worsening in the United States as it works to reduce the federal government deficit by reducing spending. Frequently, reductions in spending are accomplished by across-the-board cuts where the importance of a program is not taken into account. Furthermore, when priorities are determined for more funding for statistical programs, programs to support national accounts are not given the highest priority. In the past several years, it appears that similar situation exist in other countries.

4. These developments indicate that more detailed information is needed on past implementations and that modifications, such as the use of some type of cost-benefit analysis, need to be made in the selection process for future SNA revisions so that national accounts data remain relevant and more consistent between countries.

Introduction

5. The decision-making process used to determine changes introduced in the 2008 and 1993 SNA did not consider the cost of implementing a change or the availability of resources in national statistical offices to implement those changes. In addition, the process for monitoring the implementation of the 2008 SNA does not provide information on whether or how specific changes were implemented. In particular, information from the ISWGNA is not available on the reliability, timeliness, and coverage of the source data and estimating methods used for implementation. The lack of this information makes it difficult for users to determine the extent of international comparability of national accounts and the confidence policy makers, such as central banks, should have in current quarterly estimates of GDP and related measures.

6. The lack of information on costs makes it difficult for individual countries to prioritize implementation of individual changes in the revised SNA, especially because for most developed and developing countries have other high priority statistical needs, such as data on the labor force, job training, and food and drug safety.¹ At the same time, most countries are moving to reduce government deficits by limiting government expenditures including spending by statistical offices. In light of the shortcomings in information on the extent and cost of SNA implementation, this paper suggests that this history should inform us about how to develop future versions – i.e., “W(h)ither the SNA?”

7. The paper recommends several major changes both to the selection process for future revisions to the SNA and to implementation monitoring. For the selection process, it recommends taking into account the cost of implementation and some sort of cost-benefit analysis for each proposal. It also recommends looking at this type of information for past revisions with remaining implementation issues. For implementation, it recommends collecting detail on the reliability and timeliness of the 2008 SNA revisions. (A less-detailed version of such a questionnaires had been considered to monitor the 2008 SNA implementation) Furthermore, the process should include a review of the current system to see if past changes should be rescinded.

8. The first part of this paper discusses implementation of the 2008 SNA based largely on documents discussed at the annual meetings of the UN Statistical Commission (UNSC), the work of the Intersecretariat Working Group on National Accounts (ISWGNA), and related report by international organizations. The second part discusses issues relating to the funding of statistical programs in several countries. The third part presents information on the development of cost-benefit analysis of SNA revisions. The last part contains recommendations.

Implementing the 2008 SNA

SNA Manual

9. Timely and comprehensive implementation of 2008 SNA has been a major priority of the UN Statistical Commission (UNSC) and the since the 2008 version was completed.² The introduction (paragraph 1.4) of the 2008 SNA manual takes a strong position on implementation. For example, it states

¹ According to “Strengthening Federal Statistics” in the 2016 U.S. Budget document *Analytical Perspectives*, a very small proportion of requested funding for new statistical programs, is for improved national account or balance of payments estimates.

² The *System of National Accounts, 2008*, United Nations, the European Commission, the Organisation for Economic Co-operation and Development, the International Monetary Fund, and the World Bank Group.

The basic concepts and definitions of the SNA depend upon economic reasoning and principles which should be universally valid and invariant to the particular economic circumstances in which they are applied. Similarly, the classifications and accounting rules are meant to be universally applicable. There is no justification, for example, for seeking to define parts of the SNA differently in less developed than in more developed economies, or in large relatively closed economies than in small open economies, or in high-inflation economies than in low inflation economies.³

Paragraph (1.5) recognizes that not all countries may be able initially to produce all of the systems accounts and that some may be able produce only a reduced set of accounts. However, the SNA does not provide guidance on such accounts because it recognizes that circumstances differ among countries and the goal is to follow the complete SNA.

UNSC and ISWGNA

10. Paragraphs 1.4 and 1.5 of the SNA Manual also set the stage to define implementation in terms of “sets of accounts” a definition similar to that used for the 1993 SNA. This approach was subsequently followed with the development by the ISWGNA of “Guidelines for monitoring the 2008 implementation” as presented to the UNSC at the forty-second session (2011). These guidelines provided milestones and required data sets adopted by the UNSC in 2001. The 2011 guidelines added quarterly national accounts to the required data sets and new efforts to assess quality. The latter additions involved the application of the IMF quality assessment framework and a new conceptual compliance questionnaire that would provide information on specific components of GDP. Unfortunately, records of the results of these efforts could not be located.

11. At the forty-second session of the UNSC, a suggestion by the Australian delegate to set up a friends of the chair group to review the implementation of the 1993 SNA to identify the causes of its slow adoption and to recommend how these lessons might be used to facilitate the implementation of the 2008 SNA.⁴ At the forty-third session, the Friends of the Chair reported their findings. Among their most important finding was that for many countries, “limited political support and unavailability of requisite basic economic statistics are the main barrier to

³ This paragraph appears to be in response to concerns about limited resources for implementation primarily by developing countries as expressed in the World Bank’s “The 2008 SNA – compilation in brief.

⁴ The *System of National Accounts, 1993*, United Nations, the European Commission, the Organisation for Economic Co-operation and Development, the International Monetary Fund, and the World Bank Group.

implementation of the SNA.”⁵ The report indicated that effective political support is needed to get the resources needed to make improvements in data sources. Another interesting finding was that although most countries thought that implementing the 1993 SNA was “essential” but that implementing the 2008 SNA was “somewhat important.” The UNSC agreed with the recommendations of the report and asked the ISWGNA to incorporate them into their work on implementing the 2003 SNA.

Latest ISWGNA Report (March 2015)

12. At the forty-sixth session of the United Nations Statistical Commission (UNSC), the Intersecretariat Working Group on National Accounts (ISWGNA) reported on the nature and extent of reporting of national accounts data and conceptual compliance with the recommendations of the SNA. The highlights of the ISWGNA report included the following:

- National accounts data are reported by most Member States (95 per cent), although about 10 per cent do not report every year and 5 per cent have not reported at all over the last five years.
- Only about 55 per cent of Member States are able to submit national accounts data with a time lag of t-1.
- Nearly all of the developed and all of the Eastern European, Caucasus and Central Asian economies and 80 per cent of developing countries have reported national accounts data according either to the 1993 SNA or to the 2008 SNA methodology.
- Based on the “minimum requirement data set” and the “milestone” measures, only 43 per cent of Member States are providing the minimum required data set tables.⁶
- In terms of conceptual compliance, the 1993 SNA or the 2008 SNA have been implemented in about 85 per cent of Member States; 55 Member States have implemented the 2008 SNA.
- Over the last few years, a number of Member States have introduced revised national accounts data to incorporate a more recent benchmark year. Nevertheless, there are currently still about 80 Member States with a benchmark year before 2005 and about 30 with a benchmark year before 2000.
- It should be noted that a number of Member States might have introduced only some of the 2008 SNA recommendations, mainly owing to resource constraints.

⁵ See “Report of the Friends of the Chair on the barriers to the implementation of the System of National Accounts 1993, UNSC, document E/CN.3/2012/5.

⁶ The scope of national accounts data reported to the Statistics Division is evaluated against a standard “minimum requirement data set”, a adopted by the Statistical Commission at its thirty-second session in 2001 (see E/2001/24, chap. III), and against the “milestone” measure, adopted by the Commission at its twenty-ninth session in 1997 (see E/1997/24, para. 46).

- Therefore, taking into consideration the outdated benchmark years, the compilation of national accounts data according to the 1968 SNA by about 15 per cent of Member States and the relatively low compliance with respect to the minimum required data set, it would take significant efforts at the national level to develop basic source data for the compilation of national accounts data that are policy-relevant and fit for purpose.

Missing implementation information

13. It appears that there has been widespread implementation of the 2008 SNA change with regard to treating expenditures for research and development (R&D) as capital formation. This change results in a significant increase in the GDP for many countries. For example, Peter van de Ven has reported that the change increased GDP for OECD countries by about 2.2 percentage points.⁷ He further points out some of the difficulties in implementing this change, such as the measurement of volume and price change. He notes the lack of market price data to use for the large portion of R&D is produced on own account will result in many countries using an input deflator without any adjustments for changes in productivity growth. In the United States, where there is a substantial amount of private R&D, there is no producer price index component to use to calculate the volume measure. Thus, the comparability of R&D expenditures across countries will depend on the availability of market price data and/or the extent of productivity adjustment.

This article, however, omits mention of other more significant issues with the implementation of this and most other 2008 SNA change. The first of these issues relate to the reliability of the source data and estimating methods used to prepare benchmark, annual, and quarterly estimates. The second, and related, is issue timeliness. On source data, is direct source (survey) available? how frequently? how timely? Are current quarterly or annual estimates extrapolations with indirect indicators? In the United States, annual source-data based estimates are available for year $t - 2$. More current annual reports are based on partial data, and quarterly estimates for all periods are based on interpolations and extrapolations using an indirect source data. As a result, the current US estimates are substantially less reliable than revised estimates available much later.

14. Another major change in the 2008 SNA is the one on goods sent abroad for processing. This change, which doesn't change the value of GDP, the difference between exports and imports for goods that do not change ownership is recorded as a processing service. The discussion of this change by Eurostat indicates that new data needs to be collected, either by a new survey or by adding questions to an existing survey.⁸ There is no information on how countries have implemented this

⁷ See "New standards for compiling national accounts: what's the impact on GDP and other macro-economic indicators," in *OECD Statistics Brief*, February 2015.

⁸ See *Manual on goods sent abroad for processing*, Eurostat.

change – no information on source data reliability or timeliness. The United States has not implemented the change because of a lack of survey data.

Summary

15. Despite extensive efforts by the ISWGNA to assist countries to implement the 2008 SNA, implementation as defined by the “minimum requirement data set” and the “milestone” measures, has been disappointing. The results compiled by the UN Statistics Division probably overstate the extent of implementation because they do not provide information on how individual changes have been implemented and on the reliability and timeliness of underlying source data and methodologies. The latter information is critical in evaluating the reliability of quarterly national accounts.

Funding of statistical programs

16. As noted in the introduction to this paper, it is clear that times have never been good for increased funding of statistical programs and that the situation is worsening. In some countries, government spending has been cut sharply to reduce the deficit. Frequently, reductions in spending are accomplished by across-the-board cuts where the importance of statistical programs is not taken into account. Furthermore, when more funding is provided for statistical programs, programs to support national accounts are not given the highest priority. Because there is no repository of information of national statistical office funding, the recent experiences of the United States, the UK, Canada, and Australia are likely to be indicative of the situation in other countries.

17. In the United States, the Bureau of Economic Analysis (BEA) budget has not been increased significantly for several years, and recently all additional funding is to cover costs of moving to a new building. The Bureau of Labor Statistics, lost funding for their export price program, which provides the prices used by BEA to calculate volume measures of exports. At the Census Bureau, the legislature is seriously considering the elimination of the annual sample survey of households, the American Community Survey. In the UK, across the board budget reductions have reduced funding for the Office of National Statistics. In Canada, there were many program cutbacks to meet reduced budgets, and in June 2014, the Australian Bureau of statistics announced reductions in surveys in many areas. It also should be noted that in Canada and Australia the frequency of key household surveys and censuses have been reduced. These reductions, and the similar ones in the United States in part reflect a backlash to mandatory household surveys, intrusive questions, and a distrust of government. In other cases, elected officials think that official statistics can be replaced by “big data.”

18. As recognized in various UNSC and reports of other international organizations, funding for statistical programs is difficult to maintain, and cost of implementation needs to be given more consideration in future revisions to the SNA

A cost-benefit analysis for SNA changes

19. Many of the major changes introduced in SNA revisions require new statistics, either by starting new programs or making modifications to existing surveys. In most countries, including the United States, collecting this new information requires funding approved by both the executive and legislative branches of government. The scope of official statistics programs is usually proposed by the President and approved and funded by the legislature. (Occasionally, the legislature may end a statistical program and discontinue funding.)

20. But in the United States, statistical agencies cannot collect information to implement funded programs without approval by the Office of Management and Budget (OMB) an executive branch agency reporting to the President. The OMB follows an approval process that is required by law and implemented by regulations. The major law that provides the regulations that specify what agencies must do to collect data is the Paperwork Reduction Act (PRA). As the title PRA implies, it required agencies to reduce the burden of information collections and to obtain formal input into the scope and the content of the collections. The current regulations require all Federal agencies to seek public comment on proposed collections and to submit proposed collections for approval by OMB. After comments are received, OMB will approve or disapprove the proposed collection or to instruct the agency to make specific changes. Approval usually takes 6 months and lasts for three years.

21. To get approval, agencies must provide OMB with detailed information about the collection including the following items.

- It is necessary for the proper performance of agency functions;
- It avoids unnecessary duplication;
- It reduces burden on small entities;
- It will use appropriate survey methodology;
- The degree of compatibility with existing reporting and recordkeeping practices of those who are to respond; and
- An estimate of the average burden of the collection.

22. The OMB review of this information can be viewed as a form of an informal cost-benefit analysis. For new regulations, OMB does require a formal cost-benefit, or regulatory impact analysis and has issued guidelines to assist agencies in developing regulatory impact analyses (RIAs). These required analysis are designed to provide agencies with a basis for determining whether benefits justify the costs.⁹

⁹ See Section 6(a)(3)(c) of Executive Order 12866, "Regulatory Planning and Review," the Regulatory Right-to-Know Act and Circular A-4 (September 17, 2003) of the U.S. Office of Management and Budget's (OMB).

23. One approach to deciding on the value of future changes to the SNA is to subject each proposal to a cost benefit analysis. Such an analysis, which was not conducted in developing the 2008 SNA, would be consistent with paragraph A4.5 of Annex 4: Research Addenda of the 2008 SNA, which states;

In assessing the priority to be given to an item, three questions need to be addressed.

- a. How urgent and important is the topic to ensure that the SNA continues to be relevant to the users?
- b. How widespread are the consequences of change and how complicated will implementation be?
- c. Is the topic completely new or has much of the preparation for considering the item been completed?

The process of selecting items for investigation is one that will involve widespread consultation and involvement of both compilers and users in the review process.

24. The goal of this paragraph from the 2008 SNA is to prioritize proposed changes based on benefits to users (question a), costs of developing new estimates (question b), and benefit of having existing estimates (question c), such as those prepared for a satellite account. The last sentence is to make sure that people with experience with the change provide advice on costs and benefits. Adoption of this paragraph for the next SNA revision would be a major step to bring rationale to the revision process, especially the ranking process. Thus, a very expensive change that has little impact on the relevance of the SNA in determining GDP would be ranked very low and unlikely to be adopted. However, this paragraph does not deal with issue of what constitutes implementation of a change, a necessary requirement to calculate the cost of a change. For example if the treatment of R&D expenditures as capital formation is important to determining the cyclical performance of capital formation, then reliable current quarterly estimates would be necessary. Such estimates would require a quarterly survey with statistically reliable estimates of the major components of R&D so that the cost of developing the estimates would have to include both a quarterly and annual survey.

25. Under the U.S. information collection procedure, it can be assumed that users have demonstrated the importance of the new collection and the agencies its cost during the approval process by the President and the legislature. The OMB approval process and the public comments include a more thorough review of the both the costs, reporting burden, and reliability of the proposed survey.

Recommendations

Based on the information provided in this paper, the author has the following recommendations:

- Expand the reporting of implementation of the 2008 SNA to include information on major changes about the timeliness and reliability of the underlying source data and estimating methods for benchmark, annual, and quarterly estimates. Information should cover both current-dollar and volume estimates.
- Identify changes from the 2008 SNA or previous versions, such as illegal production to determine if they have been implemented in such a way to improve relevance of the accounts or improve international comparability. Identify changes that should be considered for rescission, or moved to a satellite account because they do not improve comparability.
- For the next SNA revision, expand the reporting as noted in the first bullet and change the definition of “implementation” to move from the use of data sets and accounts and use specific changes and key aggregates.
- For future SNA revisions, conduct a cost-benefit analysis based on 2008 SNA Annex IV of each proposed change to the SNA and avoid adopting changes that are too expensive for most countries. Use the analysis to determine priorities among proposed changes.