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CHALLENGES RELATED TO IMPLEMENTING THE SYSTEM OF NATIONAL ACCOUNTS 2008 – SOME PRACTICAL ADVICE

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CHALLENGES RELATED TO IMPLEMENTING THE SYSTEM OF NATIONAL ACCOUNTS 2008 – SOME PRACTICAL ADVICE

The world economies continue to change rapidly as new products and markets emerge and evolve. The interconnectedness of markets also continues to grow and transform. Statistical systems and frameworks must adapt if they are to continue to deliver relevant information.

In 2008, the United Nations, European Commission, International Monetary Fund (IMF), World Bank and the Organization for Economic Co-operation and Development jointly released *The System of National Accounts, 2008* (SNA2008). The System of National Accounts is a statistical framework that details a set of macroeconomic accounts that can be used by governments, businesses, and international organizations for analysis, research, and policy making. SNA2008 serves as an update to *The System of National Accounts, 1993* (SNA93) which was produced under the auspices of the same five organizations. This update better reflects the changing economic landscape and the advances in methodological research, data sources and compilation methods.

SNA2008 is not a fundamental change, but is rather considered an update from SNA93, with the expectation that countries already using the SNA93 standard should be able to implement most of the new standards in a relatively seamless manner. The main thrust of SNA2008 is to elaborate on those aspects of economies that have become more prevalent in recent years, or that have garnered recent analytical attention. New features of the SNA2008 include the treatment and classification of assets; the financial sector; globalization and related issues; the general government and public sector; and the informal sector.

Since 2009 countries around the world have begun to implement the 2008 SNA. As they do so they will be faced with a number of challenges. This note highlights the main challenges that will be faced by the national accounting community. Its purpose is to help national accounting compilers communicate the challenges associated with implementing 2008 SNA to their officials and users so that they have a better understanding of the scope and importance of the undertaking and the resources that a project of this magnitude demands.

The challenges facing national accounts compilers can be categorized into three broad categories: determining the scope, compiling the new estimates while maintaining the existing estimates, and communicating the changes to users. The remainder of the paper describes each of these challenges and offers some practical advice on how to address these challenges.

The need for national accounts

Before elaborating these challenges it is important to note that timely, relevant, comprehensive national account information represents a significant asset for any country. National accounts serve three important functions. First, timely national accounts provide fiscal and monetary policy makers with the information they need to establish the most appropriate fiscal and monetary policies required for economic growth and stability. Secondly, more and more national accounts information are required by international agencies, organizations and businesses (public and private) to form investment opinions regarding a country. Finally, national accounts information serves as a public good for the ordinary citizen, from which

they can make their own economic choices in the context of the national economy. The national accounts serve as an important intellectual asset of any nation.

Like any asset the national accounts depreciate with time and new investments need to be made periodically, to ensure that they continue to provide high quality services to their users. National accounts information worldwide is in need of this type of investment. Implementing 2008 SNA will improve the relevance of a country's national accounts information. This improvement does not come without cost. Government officials, policy makers, academics, businesses and researchers cannot expect a statistical office to undertake a revision of this magnitude without committing to a substantial investment in the program. It is in this context that the challenges associated with implementing 2008 SNA should be understood and analyzed.

Determining the scope

The first challenge associated with implementing 2008 SNA involves determining the degree of compliance to the 2008 SNA standard. It is not practical to assume that any given country can adhere to the new standard in its entirety. Choices will need to be made, and these choices will depend on a number of factors, including economic and social structures, policy requirements, data availability and the availability of resources.

1. Understanding economic and social information needs

Prior to implementing 2008 SNA the national statistical organization should have a good understanding of the basic economic and social information needs within their respective country. This should be obtained through dialogue with policy makers, researchers, government officials, private business and international organizations. It is only through effective and intentional dialogue that the national account compiler will be aware of the information needs of its user community. This dialogue can happen in a number of different venues such as:

- Establishment of an advisory committee with a broad spectrum of national account users from government, business and academia. This group could be used not only to provide guidance on what should be implemented but also feedback on the appropriateness of the methods and data sources.
- Development of a questionnaire that can be administered to users regarding information needs for current and future policy needs. Given that banks and finance officials are the major users of national accounts information, the number of interviews can be limited to a select group of 'power users' and are best done as personal interviews.
- Working groups can be established to elaborate specific issues or data needs, such as the level of detail users require (although more is generally better); to discuss the concepts and methods that are employed when deriving the estimates; and, to share preliminary results in order to obtain feedback on the usefulness of the data.

It is important that national accounts users make themselves available to provide this input, ensuring that the data are as relevant as possible. Governments can aid in this process by stressing the importance of the consultation process across all government departments and all levels of government.

That said, the role of these users should be restricted to concerns of "what" will be produced, with the task of "how" it is produced left to the national accounts compiler. While the goal of the national statistical agency is to ensure users have relevant information, they should ensure that users' involvement in the actual production of the data remains at arms' length.

The end result of these discussions should therefore provide the national statistical organization with a prioritized list of data requirements. They can then use this information to guide them as they establish the degree of compliance to the international standard.

A side benefit associated with the 2008 SNA implementation is that that these avenues of information exchange can continue beyond the implementation period and be leveraged to ensure the national accounts continue to remain relevant. One of the most important measures of quality assurance for any statistical organization is provided by a challenging user community. The establishment of information-sharing structures during the implementation process, and their continued existence following the implementation process, will not only ensure that the data remain relevant but also that quality standards are maintained or improved over time.

2. *Data availability*

In parallel with understanding the needs of the user community, the national accounts compiler should also produce an inventory of existing data holdings as well as develop an inventory of the new sources of information required with implementation of SNA2008. This inventory should be aligned with the priorities identified in the user needs consultation process. Once this inventory is completed the decision regarding compliance and the scope of the revision should, as much as possible, strike a balance between the needs of the user community and the data available to the compiler.

When data are required for high priority compliance issues the national statistical organization needs to be creative in how to best secure access to the required information. The tendency to implement a large scale survey should not be the norm. Instead, as much as possible, the national statistical agency should leverage existing information collection systems, including private sector providers of information, to secure the necessary data. In order to do this, the national statistical organization requires the power to negotiate and secure information from government organizations and non-government organizations. These data can take many forms, from operational information that may be useful in building government sector accounts, such as government revenue and expenditures, to information collected and processed by government organizations, such as household and corporation tax returns. In general, when new data are required, the implementation of a new collection vehicle should be the last resort.

The importance of legislation, memoranda of understanding and other data sharing agreements cannot be emphasised enough. If a country is serious about providing the national statistical organization with the ability to implement 2008 SNA it must also provide them with the tools to most efficiently and expediently obtain the information they require.

3. *Securing the necessary resources*

Another important challenge facing any statistical organization that is considering implementing 2008 SNA is their ability to secure the necessary resources to carry out the project. There are three types of resources that are needed to ensure the success of the project: time and timing, funding and human capital.

The implementation team must consider the best time to introduce the new estimates, from the perspective of their users. National accounts estimates are complex and users require time to integrate these data into their economic models and forecasts. The statistical organization must therefore consult with users with respect to the time of the year, and which year, it would be best to introduce the changes. In certain cases the timing of the implementation may also be constrained or restricted by national legislation. The statistical organization should also consult the international community such that the international implementation schedule is consistent with their own national implementation schedule.

A second consideration to be taken into account is the high probability that the team of individuals implementing an SNA revision is most likely the same team that is responsible for the on-going production of the national accounts estimates. If this is the case, the overall project schedule must be integrated with the on-going production schedule of national accounts information. It is important that a statistical organization take these two factors into account when planning any implementation schedule.

It is clear that any project as large and as complex as the implementation of a new accounting standard is going to demand a significant amount of resources. The need to state the obvious – that a statistical organization will require funds to undertake the project is not needed. What is necessary to state is that statistical organizations often forget that an SNA implementation often results in the development of new and more detailed national account estimates. While initial investment funds are often secured for the implementation portion of the project statistical organization are often not allocated on-going funding for the continued production of the estimates. The challenges therefore for the statistical organization is not only to secure the initial investment but to ensure that they have the on-going resources required to carry out the production of the revised estimates on an on-going basis.

A final word on compliance is simply that a national statistical agency should not be overly ambitious in its plans. A stance is often taken that if we cannot comply fully we should not comply at all. A better approach is to view the 2008 SNA implementation as an on-going process by which a country moves towards compliance with the standard and that as the requirements of its user community change and as the availability of data sources change so does the degree, level and type of compliance.

Compiling the estimates

Once the scope of the project has been determined and an implementation plan has been put in place, the task of compiling the estimates can begin. For the novice national accounts user this may seem a trivial task—it is in fact a complex operation that if not done correctly can have a significant impact on a country's historical and current economic data. The compilation challenges can be grouped into three broad categories: human capital, back-casting and the need for flexibility.

1. Human capital

The System of National Accounts is a complex framework and becoming a national accounts compiler involves being groomed and developed through years of training and acquired experience.

There are two main skill sets a statistical organization needs within its implementation team. The first is a solid understanding of the national accounting framework and the linkages between the various accounts and how changes in one account impact another account. It is an understanding of these linkages that is probably the most important skill set required by the implementation team. If these linkages are not well understood and respected, errors could be made during the implementation process.

Secondly, the national accounts compiler must have a very good understanding of the economic history of their country. Given that most compilers back-cast the revision to some point in time, they must have a good understanding, or at least access to a comprehensive set of documentation, on the nation's economic history. Knowledge related to business cycles, government policy changes, the introduction of government programs and tax laws are all important events that need to be considered when undertaking an historical revision. If the compiler does not have a solid understanding of these events the possibility exists that the impact of these events may be eliminated through a SNA revision back-casting exercise.

2. *Back-casting*

Another challenge faced by a national statistical organization when implementing 2008 SNA centers on decisions pertaining to the continuity of the national accounts time series. In many ways national accounts data form an important part, if not the most important part of a country's economic history. The data themselves can be read like a book highlighting the economic ebbs and flows of a nation. When implementing a new accounting standard a decision needs to be taken with respect to how far back the changes should be applied. A country has two basic choices; it can either re-write history according to the new standard or indicate to users that after a certain point in time the economic history will be viewed through a new lens.

Users of national accounts data like long consistent time series. There are some very pragmatic reasons for this, including the ease of use in economic modeling. As such, when economic data are subjected to a new set of concepts and methodologies most analysts prefer that these new concepts and methodologies be carried as far backwards as possible. This is a major challenge for a statistical organization, with three things to be considered during the implementation phase.

1. The first consideration is the significance of the potential break in the time series. If the break is not significant it may be best for the statistical organization to note the change for users, without back-casting the data. If the break is significant then the statistical organization should try to back-cast the data, but only to a point where the new phenomena begins or to the point where it becomes significant.
2. A second consideration is the availability of data to undertake a back-casting exercise. While users may desire to have a long consistent time series, national accounts compilers do not always have access to the source data needed compile back periods. As such, they often need to develop modules which will carry the new concepts and methodologies back in time. The statistical organization is often in the best position to do this work, and have the added responsibility of informing users exactly how the data were carried back, allowing users to understand and challenge the decisions that were made.
3. A third consideration involves the amount of detail that can or should be carried backwards. National accounts compilers generally have access to a greater amount of current period detailed information than they do for any back period. As such, national accounts the farther back they carry the new concepts and methodologies the more likely it is that they have to aggregate series.

Statistical organizations also face an important challenge when they introduce new classification systems. The implementation of a new standard is often used to introduce a new classification system, such as a final demand classification system (imports, exports, household final consumption expenditure) or a product or industry classification system. The question of how far back these classification systems should be back-cast is an important one to statistical organization. It is true that the new classification systems will be more relevant for the products and transactions that occur today but it is equally likely that these classification systems will not be relevant for the products and transactions that took place 20 or 30 years ago. National statistical organizations therefore need to determine a point in time at which they will convert from the old classification system to the new classification system.

In addition, one would not expect that changing a classification system would have a significant impact on annual or quarterly growth rates and levels. That said, the statistical process of seasonal adjustment and deflation are very sensitive to changes in classification. The challenge for the statistical organization is therefore to minimize the impact the change in the classification system has on the quarterly and annual growth rates. The implementation of a new classification system should provide a more relevant picture of the current economic structure but it should not impact the economic history.

Finally, statistical organizations need to set aside enough time and resources to properly document their implementation of the new accounting standard. The metadata associated with the implementation project is as important as the data itself. Data users will not only need to understand the changes but they will also need to understand how the new data are constructed, how the new data compare to the old data, and the point in time at which the new concepts were implemented.

The implementation of the new accounting standard will often result in the production of a new national accounts database. It is a good practice for the statistical organization to archive the old national accounting database and continue to make it available to data users. This transparency allows users to understand the changes that have been adopted through the implementation project and will preserve an important part of a country's economic history. It will also allow them to link the different vintages of data, if this has not been done or only partially done by the statistical organization.

3. *The need for flexibility*

While a great deal of work is necessary to identify which priority issues to implement and identifying available data sources, even more work is required to determine if the implementation plan can be carried out. For example, a country may choose to capitalize research and development, because it has both a user base for the information and available data. However, it is not until they begin to work on the estimates and develop some preliminary series that they will determine the quality of the data and whether or not it can be implemented into the core set of accounts. Simply put, any implementation plan must have room for flexibility—those areas where plans need to be adjusted because what was thought could be done, in fact cannot.

The challenge is not so much the work itself but convincing decision makers that part of the funding that is directed towards implementation of the 2008 SNA must be seen as an investment in our knowledge base of not only what can be done but also what cannot be done at this time.

Communication

The third, and probably the most important challenge associated with implementing the 2008 SNA centers around communicating the changes to users of national accounts' information. These challenges can be categorized as follows:

1. Most users of national accounts data do not understand the structure or value of national accounts information.
2. Most statistical agencies do not necessarily know all the users of national accounts data.
3. Most users are very skeptical about revisions and often perceive revisions as a correction due to an error.
4. Most sophisticated users of national accounts data need substantial lead time to integrate the new information into their models and analysis.

1. *Getting the message out*

If gross domestic product, net worth or household disposable income are mentioned to a user of economic data, they, for the most part, will be able to explain the concepts behind the measure and how it can be used in economic forecasting and analysis. If, however, the term System of National Accounts was mentioned to data users they are more likely to appear perplexed, wondering "what are you talking about?" The challenge is to explain the significance of what is being considered when a revision to a country's national accounts is being discussed. You need to speak in their terms, mentioning the outputs of the system rather than the system itself. It will be much easier to garner the attention of a user if you say that

you are going to increase the level of a country's gross domestic product than if you say you are going to expand the asset boundary to include new intangible assets.

2. *Identifying your users*

A second challenge a statistical organization faces when communicating its 2008 SNA implementation plans lies in identifying who this information needs to be communicated to. Most statistical organizations have vehicles in place—often in the form of official working groups, presentations and training material—to communicate national accounting changes to monetary authorities, various levels of government and large private financial institutions or economic forecasters. However, processes are often lacking and new lines of communication are often needed pertaining to the use and understanding of the information in academia, by journalists, by private enterprises and by the general public. A country's implementation plan should include a clear communication plan which reaches out to these individuals and groups.

The type and timing of the communication to these users needs to be carefully managed. Communicating too early risks introducing confusion between the existing set of accounts and the future set of accounts. Furthermore, as noted earlier, plans evolve and a country may be unable to implement all of the adjustments it originally intended. Advertising a modification then not following through is both frustrating and confusing to users. On the other hand, communicating too late leaves users without enough time to understand the changes and put them into context.

3. *Overcoming the perception of error*

A third communication challenge that a statistical agency must overcome when implementing the 2008 SNA is the perception that the revision is intended to correct an error or errors within their national accounts database. Not only does a statistical organization need to inform users about the nature of revisions but they must also educate users on the reason why national accounts data need to be revised. Unless advised otherwise users of national accounts data assume that any large revision to the data is a result of compilation issues with earlier vintages of the data. An extensive communication plan would clarify the reason for the revision. The virtues of the revision—increased relevance, detail and international comparability—must be communicated.

An additional challenge is that this information does not only need to be communicated when the revisions take place but in many ways the revision itself needs to be documented as an important event in the measurement of the economic history of a country. This is especially important if a country chooses to introduce a break in series with a particular revision. For example, if a country chooses to capitalize research and development starting in 2012 then all users of data for that country must understand that the growth or decline in GDP and investment between 2011 and 2012 is due, in part, to a change in the accounting standard rather than a change in investment. This meta information becomes as important as the data series itself.

4. *Providing lead time*

Finally, users of national accounts information will need substantial lead time to incorporate the new national accounts information. Economic models are often built from national accounts information. If the presentation, detail or timing of national accounts information changes, users will need to adapt their forecasting and analytical models. Users will need to map the new data into their models as well as devote time to understanding the new data to ensure that they maximize their analytical usefulness. Forecasters also often have their own time constraints with respect to when they need to produce their forecasts. If they are not provided the data in advance they will not be able to meet their own timelines. One worthwhile way

of addressing these challenges is to provide the structure of the new accounts well in advance of the release, releasing satellite accounts where appropriate and releasing the data outside of a normal production period, thereby allowing users to integrate the new information outside of a routine update to the time series.