

National Accounts

The United Nations Statistics Division (UNSD) contributes to the international coordination, development and implementation of the System of National Accounts (SNA). It undertakes methodological research on issues on the research agenda for the SNA in collaboration with the Inter Secretariat Working Group on National Accounts (ISWGNA) to periodically update the SNA. Moreover, it drafts and updates normative standards, guidelines, training material and compilation guidance on national accounts and economic statistics for the implementation programme of the SNA and supporting economic statistics

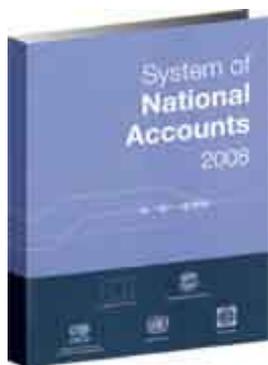
The Division delivers a statistical capacity building programme for the implementation of the SNA and supporting statistics through a series of regional and interregional workshops and seminars in collaboration with the regional commissions and regional agencies and through a limited number of individual country technical assistance missions.

The Division also collects and disseminates annual national accounts statistics from countries and provides substantive service to the Committee on Contributions of the Fifth Committee of the United Nations on technical aspects of the elements of scale methodology for assessing the contributions to the United Nations by Member States.

The System of National Accounts

The latest version of the international statistical standard for the national accounts, adopted by the United Nations Statistical Commission (UNSC), is the *System of National Accounts 2008* (2008 SNA).

- The **2008 SNA** is an update of the 1993 SNA. The update was in 2003 entrusted to the ISWGNA, comprising representatives of the European Commission (Eurostat), Organisation of Economic Cooperation and Development (OECD), International Monetary Fund (IMF), World Bank and the United Nations, to address issues brought about by changes in the economic environment, advances in methodological research and the needs of users. The first seventeen chapters of the 2008 SNA, comprising the accounting rules, the accounts and tables, and their integration, were adopted by the UNSC in 2008; chapters 18 to 29, comprising the interpretations and extensions of the accounts and tables of the System, were adopted by the UNSC in 2009. The 2008 SNA is the result of a process that was notable for its transparency and the wide involvement of the international statistical community and provides the international statistical standard for national accounts. In its



adoption of the 2008 SNA the UNSC encouraged Member States, regional and sub-regional organizations to implement its recommendations and use it for the national and international reporting of national accounts statistics. The 2008 SNA is available as a searchable PDF document, in all official United Nations languages (Arabic, Chinese, English, French, Russian and Spanish), on the UNSD website at:

<http://unstats.un.org/unsd/nationalaccount/sna2008.asp>. The printed version of the English version can be obtained from the United Nations publications website at:

<https://unp.un.org/Details.aspx?pid=18327>.

At its first session in 1947, the UNSC emphasized the need for international statistical standards for the compilation and updating of comparable statistics in support of a large array of policy needs. Specifically, the UNSC recommended that the United Nations Statistical Office, in consultation with the interested specialized agencies, should work on guidelines for national accounts statistics (national income and expenditure), taking into consideration best practises and international comparability. Apart from the 2008 SNA, the following national accounts standards were produced throughout the history of the UNSC:

- The **1953 SNA** was published under the auspices of the UNSC. It consisted of a set of six standard accounts and a set of 12 standard tables presenting detail and alternative classifications of the flows in the economy. The concepts and definitions of the accounts were widely applicable for most countries, including developing countries.

- The **1968 SNA** extended the scope of the national accounts substantially by adding input-output accounts and balance sheets; giving more attention to estimates at constant prices; and making a comprehensive effort to bring the SNA and the Material Product System (MPS) closer together.
- The **1993 SNA** (also entrusted to the ISWGNA) represented a major advance in national accounting and embodies the result of harmonizing the SNA and other international statistical standards more completely than in previous versions.

Implementation of the SNA

Besides the methodological work on national accounts, one of the important objectives of the UNSD is to ensure that countries implement the recommendations of the SNA.

At its fortieth session the UNSC considered and supported the implementation strategy of the 2008 SNA proposed by the ISWGNA.

The implementation of the 2008 SNA represents a global statistical initiative with the objective to assist countries in developing their statistical and institutional capacity to (a) make the conceptual change over from the 1993 SNA to the 2008 SNA and (b) to improve the scope, detail and quality of the national accounts and supporting economic statistics.

The 2008 SNA implementation strategy also aims to support sound macroeconomic management and evidence-based policy formulation through the sustained compilation and reporting of national accounts and related source data.

Assessments of the slow progress in the implementation of the 1993 SNA pointed to structural weaknesses in basic source data and institutional statistical capacity. An analysis of these structural weaknesses indicates the need for strengthening three building blocks of the statistical production process: a) business registers and frames, b) source data from annual and infra-annual surveys, and administrative sources, and c) institutional statistical capacity.

In addition to these structural weaknesses, there is a need to address user's preference for consistent information on economic activity during a business cycle; comprising the release of component data on segments of the economy in addition to macroeconomic aggregates. Such data allow users to assess signals on

economic, financial and monetary phenomena, which are first provided by short-term statistics and subsequently with the release of quarterly and annual national accounts.

To deal with these issues the implementation of the 2008 SNA and supporting statistics is addressed through an integrated economic statistics approach. This approach uses the 2008 SNA as the umbrella framework that provides the conceptual and numerical coherence for developing the statistical production process for economic statistics, including the required institutional arrangements for integration.

The efficiency and sustainability of the global statistical initiative for the implementation of the 2008 SNA rest on the agreed principles of the implementation strategy, namely: (a) strategic planning; (b) coordination, monitoring and reporting; and (c) improving statistical systems.

The principles of the implementation strategy are operationalised through four elements, namely: (a) use of National Strategies for the Development of Statistics (NSDS), or similar national plans setting out priorities, as the strategic planning framework, (b) a programme information structure built around the statistical production process, and the scope and compliance of the national accounts and supporting economic statistics, (c) statistical capacity building, and (d) the stages of implementation leading to the change over to the 2008 SNA.

NSDS is the most widely used tool for statistical planning in developing countries. Many already have or are updating their NSDS to include the implementation of the 2008 SNA. A programme information structure facilitates the co-ordination, monitoring and reporting on the SNA implementation in a multi-stakeholder environment. Statistical capacity building comprises four modalities: (a) training and technical cooperation, which emphasize institutional capacity building and the development of data sources; (b) manuals and handbooks, which provide methodological guidance and consideration for the fundamental issues of data sources and quality; (c) applied research to develop new concepts for meeting new measurement challenges; and d) advocacy, which aims to support ongoing dialogue among statistical producers, the various levels of government, the business sector, the academic community, and the general public about user needs for official statistics and the progress in meeting those needs.

Three distinct stages towards the change over to the 2008 SNA are identified, namely: (a) a review of strategic frameworks and detailing of national and regional implementation programmes; (b) the adaptation of classification frameworks, business registers and frames, surveys, administrative data sources and information technology infrastructure; and (c) the application of

adapted frameworks and source data, backcasting and changeover to the 2008 SNA.

Each country determines its own duration of the stages leading to the change over to the 2008 SNA. However, it is expected that from 2014 onwards, most of the Member States would change over to the 2008 SNA following a gradual two to three year transition for each change over stage.

The UNSD facilitates the implementation programme for the 2008 SNA and supporting statistics through a series of regional and interregional workshops and seminars in collaboration with the regional commissions and regional agencies and through a limited number of individual country technical assistance missions.

Through these interactions countries are encouraged to assess the current capacity of all aspects of the statistical production process to produce national accounts and supporting statistics with a view to set up a national implementation programme for the 2008 SNA. For this purpose UNSD developed a Diagnostic Framework for National Accounts and Supporting Economic Statistics (DF-NA&ES). This tool enables countries to identify the strengths and weaknesses in their statistical systems for supporting the compilation of the national accounts.

Based on this assessment countries are able to develop goals regarding the relevant scope and detail of the national accounts and supporting statistics required to inform policy and decision making needs. These goals (or vision) need to be set in consultation with all relevant stakeholders in the national statistical system. An action plan, based on the self assessment, identifying a set of actions to accomplish statistical and institutional goals is an important step to establish a road map for the implementation of the 2008 SNA and supporting statistics and is instrumental in the improvement of the statistical agenda to ensure adherence to best practices in official statistics.

Countries are encouraged to submit the assessment of their statistical systems and implementation plans to the UNSD for posting on its website dedicated to the coordination and monitoring of the implementation of the 2008 SNA. The website is available at: <http://unstats.un.org/unsd/nationalaccount/imp.asp> .

National accounts database

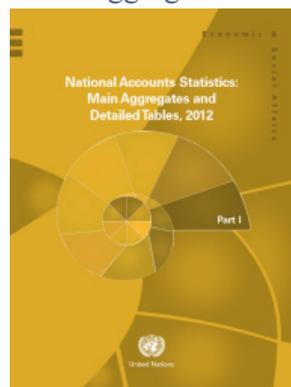
To serve the analytical purposes of the United Nations and the public the UNSD, mandated by the UNSC, annually collects national accounts data from Member States. The UNSD uses a questionnaire based on the SNA framework to obtain official national accounts data

from Member States. Currently, two data sets are compiled and published in two publications, namely:

National Accounts Statistics: Main Aggregates and Detailed Tables; and National Accounts Statistics: Analysis of Main Aggregates.

More information can be obtained from the UNSD national accounts website at: <http://unstats.un.org/unsd/nationalaccount/default.asp> .

National Accounts Statistics: Main Aggregates and Detailed Tables



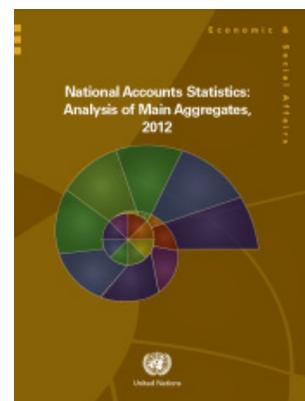
The first National Accounts yearbook appeared in 1958 and contained data for 70 countries and territories. The most recent yearbook contains data for more than 200 countries and territories.

Data are reproduced as they are reported by the countries in their respective national currencies. These national accounts data can be obtained from the *UNdata*

facility on the UNSD website at: <http://data.un.org> .

National Accounts Statistics: Analysis of Main Aggregates

To improve the usefulness of the national accounts data, main aggregates of the UNSD national accounts database are updated to the most recent year using secondary sources and estimates. This publication contains data from 1970 on GDP by type of expenditure and by kind of economic activity; at current and constant prices; in both national currency and United States dollars. The data are aggregated into various groupings, such as, geographical areas and level of development.



The data are also available for download from the UNSD national accounts website at: <http://unstats.un.org/unsd/snaama/introduction.asp> .

Where countries stand

The latest assessment of the level of implementing the 1993 SNA is based on the reporting of national accounts statistics by Member States to the UNSD through its national accounts questionnaire. The reporting of national accounts data has improved markedly in recent years. The improvement comes entirely from developing countries, especially in Africa and the Caribbean. Almost all developed countries and countries in transition already report national accounts data to the UNSD. At the end of the 2012 reporting period, 94 per cent of developing countries had reported at least once in the reporting periods from 2008 to 2012.

In terms of the conceptual compliance with the 1993 SNA virtually all developed countries and countries in transition and about 79 per cent of developing countries compile national accounts data according to the 1993 SNA or the 2008 SNA. The reporting of national accounts data according to the 1993 SNA or the 2008 SNA by developing countries has shown a marked improvement during the recent reporting periods.

An assessment of the scope of national accounts data provided shows that almost all developed countries and about 64 per cent of developing countries have reported according to milestone 2 level¹ in the 2012 reporting period. This measure of milestone 2 indicates that the country at least reports value added by industries and final expenditures on GDP, either in current prices or in volume measure, and gross national income (GNI). When the scope of national accounts data is evaluated in terms of the minimum requirements data set (MRDS)², 46 per cent of countries are able to provide the seven tables in the 2012 reporting period.

Use of national accounts

Originating from 17th century war economics and set into its modern framework of the Keynesian macro-economic theory by Richard Stone and Simon Kuznets in the 1930s, the measurement of a country's income and expenditure has a long history

¹ The milestone methodology is described in the reports of the Intersecretariat Working Group on National Accounts to the Statistical Commission; document E/CN.3/1997/12 and E/CN.3/2011/6.

² The MRDS is defined in the reports of the Intersecretariat Working Group on National Accounts to the Statistical Commission; document E/CN.3/2001/8 and E/CN.3/2011/6.

before it was formalized in the present System of National Accounts.

Government, businesses and civil society need to know what progress is being made with specific economic agenda. This gives rise to the need, not only to monitor progress but also to evaluate whether or not goals are being achieved. To obtain this overview of the economic processes data need to be organised in a framework that integrates and reconciles the data.

The essence of national accounting is integration: bringing together data on all economic activities from different sources and arranging them in such a way that they present a coherent picture of the whole economy. This requires the persistent review of basic data sources and their adaptation in using them. National accounting, to a greater degree than in other branches of statistics, is an art, not a science. In this regard, it is important to develop a "feel" for the resources and statistics as well as their use under specific circumstances.

The SNA describes a coherent, consistent and integrated set of macroeconomic accounts in the context of a set of internationally agreed concepts, definitions, classifications and accounting rules. In addition, the SNA provides an overview of economic processes, recording how production is distributed among consumers, businesses, government and foreign nations. It shows how income originating in production, modified by taxes and transfers, flows to these groups and how they allocate these flows to consumption, saving and investment. Consequently, the national accounts are one of the building blocks of macroeconomic statistics forming a basis for economic analysis and policy formulation.

Aggregates, such as GDP and GDP per capita, are widely used as summary indicators of economic activity and welfare. Changes in such aggregates, and their associated price and volume measures, are used to evaluate the overall performance of the economy and hence to judge the relative success or failure of economic policies pursued by governments. The compilation of at least some of the main aggregates of the national accounts on a quarterly basis may significantly improve the monitoring of the behaviour of the economy. It is recommended that the accounts, tables or balance sheets of the SNA are compiled more frequently than once a year, particularly for advanced and emerging economies.

A timely, accurate and a reasonably detailed set of national accounts allow the analysis of leads, lags and structural changes, providing the basic data for business cycle analysis. The national accounts are also used to investigate the causal mechanisms at work within an economy. Such analysis usually takes the form of the estimation of the parameters of functional relationships between different economic variables by applying

econometric methods to time series data in both value and volume terms compiled within a national accounting framework. The SNA is sufficiently flexible to accommodate the requirements of different economic theories or models, provided only that they accept the basic concepts of production, consumption, income, etc. on which the SNA is based.

Economic policy in the short term is formulated on the basis of an assessment of the recent behaviour and current state of the economy and a view, or forecast, about likely future developments. Short-term forecasts are typically made using econometric models described above. Over the medium or long-term, economic policy has to be formulated in the context of a broad economic strategy using the structural properties of the SNA.

The national accounts are also used for international reporting of national accounts data that conform to standard, internationally accepted concepts, definitions and classifications. The resulting data are widely used for international comparisons of the volumes of major aggregates, such as GDP or GDP per capita, and also for comparisons of structural statistics, such as ratios of investment, taxes or government expenditures to GDP. Such comparisons are used by economists, journalists or other analysts to evaluate the performance of one economy against that of other economies. They can influence popular and political judgements about the relative success of economic programmes in the same way as developments over time within a single country. Databases consisting of sets of national accounts for groups of countries can also be used for econometric analyses in which time-series and cross-section data are pooled to provide a broader range of observations for the estimation of functional relationships.

The national accounts provide a co-ordinating conceptual framework for the design and collection of economic source statistics and also provide a framework for identifying major gaps in the range of available short-term statistics.

Though short-term indicators provide valuable information about specific aspects of current economic developments they do not provide a coherent, comprehensive and consistent picture of the different aspects of the current economic situation for purpose of

integration into a consistent analytical framework. However, within the analytical framework of the national accounts the movements of short-term indicators, such as monthly indices of industrial production, consumer or producer prices can be interpreted and evaluated.

Users require transparency in the compilation of the national accounts. Consequently, it is important to provide documentation to users about data sources and the compilation process. In the case of revisions, transparency is particularly important in handling the continual conflict between timeliness and accuracy.

Resources for statistical purposes are not always available or comprehensive enough. It is time-consuming and expensive to collect adequate, accurate and detailed source data. It is also time-consuming and expensive to compile comprehensive, accurate and detailed national accounts aggregates. To find a solution for the timeliness and accuracy conflict within the resource constraints, it is common to compile preliminary estimates based on a limited set of information that is available at the time and to revise the estimates to incorporate more comprehensive and more up-to-date data as they become available.

SNA News and Notes

The SNA News and Notes is a bi-annual information service of the ISWGNA prepared by the UNSD. It contains information on the latest national accounts developments and discusses topical issues. The SNA News and Notes is published in four languages (English, French, Russian and Spanish) and is available on the UNSD website at: <http://unstats.un.org/unsd/nationalaccount/snaneews.asp>.

Contact the National Accounts Section for enquiries on national accounts data and methodology at: sna@un.org.