

For Global Consultation

**SNA Chapter 20 Elaborating the Accounts:
Annotated Outline**

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(Update of existing 2008 SNA Chapter 18)

I Introduction

- Many statistical offices produce annual accounts based on annual survey data, administrative data and business data as well as range of other sources. In producing intra-annual data like quarterly estimates, direct data sources are used as well as indicators, and in most cases linkages with the annual datasets are necessary to ensure consistent time series. Some countries also rely on comprehensive (e.g., five-yearly) benchmark data, likewise long time series consistent with the estimates from the latest comprehensive revision need to be compiled.
- Irrespective of the data availability and data content framework, users have high expectations and want timely, reliable, consistent and accurate estimates with no revisions or biases. However, statisticians must make various difficult choices which create a tension between timeliness and accuracy since more comprehensive and firmly based data usually take longer to become available (sometimes three-four years) than short-term indicators. Producing accounts as quickly as possible with the best information available at that time inevitably means revisions will be made to the initial estimates. The publication of revised datasets is not a sign of weakness in the statistical system, rather it should be seen as improving the quality and accuracy of the original estimates. Having no revisions imply perfect accounts and estimates, this is impossible and as time goes by accounts and estimates with no revision are more likely to be of lower quality.
- There is growing user demand for more timely regional statistics with higher quality and greater granularity. Often there are data gaps and various techniques are used to produce estimates.
- This chapter touches on these temporal and spatial issues and the techniques that can be utilised as well as references for further guidance. In doing so:
 - some of the existing 2008 SNA Chapter 18 text will be used;
 - a new structure and broader coverage will be applied; and
 - links to other available guidance will be included to the extent possible.
- Section I will introduce the chapter. Section II will look at the temporal disaggregation of annual data and describe the methods and the issues related to the compilation of infra-annual statistics, mainly focusing on quarterly data for the supply and use of goods and services as well as institutional sector accounts. Section III will consider methods and issues related to the spatial disaggregation of national data, thereby looking at regional accounts for value added and employment by industry, including regional supply and use tables as well as the regionalisation of

¹ Prepared by Sanjiv Mahajan (Supporting Editor) with inputs and clearance by the SNA Project Manager and the SNA Lead Editor.

² Building upon the existing 2008 SNA Chapter 18 with possible ideas, inclusions and sources of change.

³ The overall structure of this chapter is in line with the proposal in paragraph 35 of the document "A Proposal for the Provisional Structure of the 2025 SNA". This was discussed and agreed by the AEG at its 19th Meeting in May 2022.

institutional sector accounts. Finally, Section IV will focus on benchmark revisions and the compilation of consistent time series data.

II Temporal disaggregation

This section will build on parts of the existing 2008 SNA Chapter 18 and focus on:

- Timeliness versus accuracy provides a key tension. In general, early estimates are more likely to be prone to revision or even a bias as latter estimates become available based on more data content. However, in periods like the COVID-19 pandemic, official statistics producers have utilised a range of indicators and different techniques (e.g., nowcasting) to provide users including policymakers much needed data on the economy well in advance of the traditional quarterly national accounts.
- Quarterly estimates, not only regarding GDP and expenditures but also addressing quarterly institutional sector accounts.
 - Links between the annual accounts and the quarterly accounts. The use of indicators is prevalent, so that sometimes there may be little similarity between the two sets of methodologies.
 - Methods and the use of indicators may be quite different in relation to (i) quarterly GDP and expenditures and (ii) quarterly institutional sector accounts.
 - Benchmarking quarterly estimates to annual estimates. Whatever the degree of dependence on indicators, at the point when a new annual value is available, reconciliation with the quarterly data is called for, and this may disrupt the relationship with the indicators previously used.
 - Short introduction to seasonal adjustment including references to existing guidance. A general seasonal adjustment policy in line with the principles for seasonal adjustment although exceptions will exist. The trade-off between harmonisation and particular needs is carefully considered, guaranteeing the maximum possible degree of harmonisation and consistency.
 - Techniques for producing national accounts estimates from partial indicators, through use of data matching and bridge tables.
 - Possible uses of micro data.
- Monthly indicators
 - Role of monthly indicators, often not on a SNA conceptual basis. Link to Quarterly National Accounts guidance.
 - Role and growing availability of real-time (or faster) indicators.
 - Nowcasting.
- Accounts / aggregates in volume terms and quarterly volume estimates. What aggregates and accounts are covered and generated in volume terms. There is not one single approach such as producing all estimates initially in current prices and then deflating to volume terms but some series are available in current prices while others are more easily estimated first in constant prices.
- Business cycle analyses and link(s) to economic cycle. This will touch on that the business cycle is different from the economic cycle. The former reflects a broader concept reflecting GDP in volume terms, real income, employment, industrial production and wholesale-retail sales. This broader

concept is more in line with the wider literature on business cycles, where considerable weight is placed on a plethora of monthly indicators and is available earlier.

III Spatial disaggregation

This section will build on parts of the existing 2008 SNA Chapter 18 and focus on:

- Regional estimates of production, supply and use of goods and services:
 - Production and GDP versus GVA – differences between GDP and GVA at the regional level. Also, sometimes Regional GVA is referred to as Regional GDP for convenience as opposed to correctness.
 - General basis for regional accounts – the regional territory and the extra-regio territory. In many countries, extra-regio territory can be significant and should be shown separately.
 - Methods for regionalisation, including pros and cons of various methods – bottom-up, top-down, pseudo methods, etc.
 - General principles and methods for regionalising GVA and GDP, including issues for particular industries, e.g., head offices.
 - General principles and methods for regionalising GFCF, e.g. data collected, proportioning using proxies.
 - General principles and methods for regionalising employment data.
- Regional SUTs / IOTs reflecting some of the challenging issues such as trade flows, distribution trading margins and taxes on products.
- How the links between spatial and regional disaggregation can be established with benchmark and reconciliation.
- Regional sector accounts:
 - Issues related to the regionalisation of institutional sector accounts.
 - Regionalisation of household sector accounts.
- Links to regional accounts' guidance.

IV Revisions and compilation of consistent time-series

- Revisions (links to the Communication Chapter and any duplication to be avoided):
 - Why are revisions necessary?
 - Handling new data (e.g., actual data replacing forecasts, higher survey response rates, late returns, etc., new data sources and error correction – rarely a source of significant revision).
 - Updating processes (e.g., Benchmarking (annual, 5-yearly, etc.), Census (10-yearly), annual chain-linking, seasonal adjustment and improved deflation, revised balancing – estimates evolve, inevitable and unavoidable, and new or improved IT systems.
 - International drivers (e.g. international guidance manuals, e.g., SNA, BPM, etc., classifications, e.g. ISIC, CPC, etc., and improved or new methods, e.g., FISIM, SPEs, illegal activities, R&D, etc.).
 - Revision policy

- Types of revisions taxonomy.
 - A regular / routine revision refers the incorporation of more complete (but not yet final) source data, improved models, and / or methods into the compilation process. Regular revisions occur for both sub-annual and annual estimates.
 - A benchmark revision usually incorporate adjustments to higher frequency data to align with the corresponding lower frequency results, based on more complete information which have become available.
 - A comprehensive revision incorporates the final vintages of source data as well as any new or updated concepts, accounting treatments, classifications or substantially improved methods. These generally occur when there are major changes to the accounting standards that are used to compile the accounts.
- Comprehensive benchmark revisions and the compilation of consistent time series:
 - With comprehensive benchmark revisions, various issues such as resources, data availability and systems are key factors in determining how far back the revisions are made to ensure consistent long-run time series are maintained. For economic modeling, users' demands are for consistent time series going back a long time, even over 100 years. However, this is resource intensive. Thus any reduction in the length of available time series is a key consideration for producers of official statistics to reflect.
 - Issues of consistency and comparability of long run data is viewed highly important by users. Discontinuities should be avoided.
 - Handling long back data revisions, e.g., period by period investigation, use of link factors or wedging back to a specific point in time, etc.
 - Growth rates versus levels – preserve the growth rates for the latest periods by linking onto the last fixed period until the opportunity arises to revise all the levels going back in time.

Schematic Overview

I	Introduction
II	Temporal disaggregation
III	Spatial disaggregation
IV	Revisions and compilation of consistent time series

References

- Guidance notes: where changes are appropriate: possibly, CM.3
- 2008 SNA
- BPM 6
- ESS Guidelines on Seasonal Adjustment

- Eurostat - Manual on Regional Accounts Methods
- OECD - Handbook on Quarterly GDP methods
- Eurostat - Handbook on Quarterly Accounts

Key Stakeholders Consulted

- SNA editors