

Draft as at 23<sup>rd</sup> September 2022

## 2025 SNA Chapter 16 Labour: Annotated Outline



# SNA Chapter 16 Labour Accounts: Annotated Outline<sup>1, 2, 3</sup>

(Update of existing 2008 SNA chapter 19)

## I. Introduction

- There are many key policy questions that hinge on a better understanding of the labour market and its links and interactions with various aspects of the economy. One can think of the impact on the labour market and the changing nature of ‘work’ from changes in production arrangements, including those changes caused by legislation, technology innovation, globalisation and digitalisation. These issues can affect the numbers employed and how they are deployed.
- The use of labour is at the heart of production forming a primary input alongside capital. However labour is currently only really recognised in the main accounts through compensation of employees and, albeit implicitly, mixed income (including informal production) as well as some employment data by industry. Labour needs to be given a more prominent role given its importance in the production process and its linkages to other areas of interest such as the analysis of unit labour costs, per head analyses, labour productivity, etc. It is also important to have better insights into the labour market through more detailed analyses of specific areas such as education and healthcare as well as wider links to skills demand and skills shortages. Furthermore, they may also provide more insights into aspects of living conditions and well-being.
- With links between measures of output and labour input, the concept of labour used must match the coverage of production in the SNA. The relevant standards on the labour force are maintained by the International Labour Organization (ILO). The ILO standards are contained in “resolutions” to which the SNA must link and be adjusted appropriately.
- This chapter covers the topic of labour accounts and places labour in the same position as other primary inputs into the production process and supports extensions to the accounts such as valuing human capital.
- The chapter will also discuss different forms of employment, which has become more relevant in view of changes in the labour market as observed in various countries over the past two-three decades amongst others in view of increasing globalisation and digitalisation (e.g., the GiG economy).

---

<sup>1</sup> Prepared by Sanjiv Mahajan (Supporting Editor) with inputs from Ann-Lisbet Brathaug (Statistics Norway), Jorrit Zwijnenburg (OECD), Michael Smedes (ABS) and the SNA Project Managers as well as cleared by SNA Project Managers.

<sup>2</sup> This is an annotated outline for the chapter. Some links between this chapter and other 2008 SNA chapters are noted. In the drafting stage, there may be further adjustments to balance the content between chapters.

<sup>3</sup> This chapter builds upon the existing 2008 SNA Chapter 18 and will re-use relevant material as appropriate.

- The chapter will include an introduction followed by Section II covering the labour account framework and its four quadrants; Section III covering the types of labour; Section IV covering the enhanced measures of labour inputs; Section V covering the labour market data links to Supply and Use Tables; Section VI discussing specific issues; and finally, Section VII covering the labour accounts links to education, training and human capital. See the Schematic Overview for details.

## **II. Types of labour**

This section will cover each of the different types of labour. There may be more to add, e.g. maybe new terminology relating to new forms of employment, the GIG economy, etc. We may need to have a look at the recent UNECE guide on this topic and possibly see if ILO has more recent information on this. Some references to ILO in the outline will be sought so that we explain similarities and differences with existing measures.

### **Employees**

- Employees are persons who, by agreement, work for a resident institutional unit and receive remuneration for their labour. Their remuneration is recorded in the SNA as compensation of employees. The relationship of employer to employee exists when there is an agreement, which may be formal or informal, between the employer and a person, normally entered voluntarily by both parties, whereby the person works for the employer in return for remuneration in cash or in kind. There is no requirement that the employer should declare the agreement to any official authority for the status of employee to apply.
- More details to add including issue of residency.

### **Self-employed**

- Self-employed persons are persons who are the sole or joint owners of the unincorporated enterprises in which they work, excluding those unincorporated enterprises that are classified as quasi-corporations.
- More details to add.

### **Unemployed**

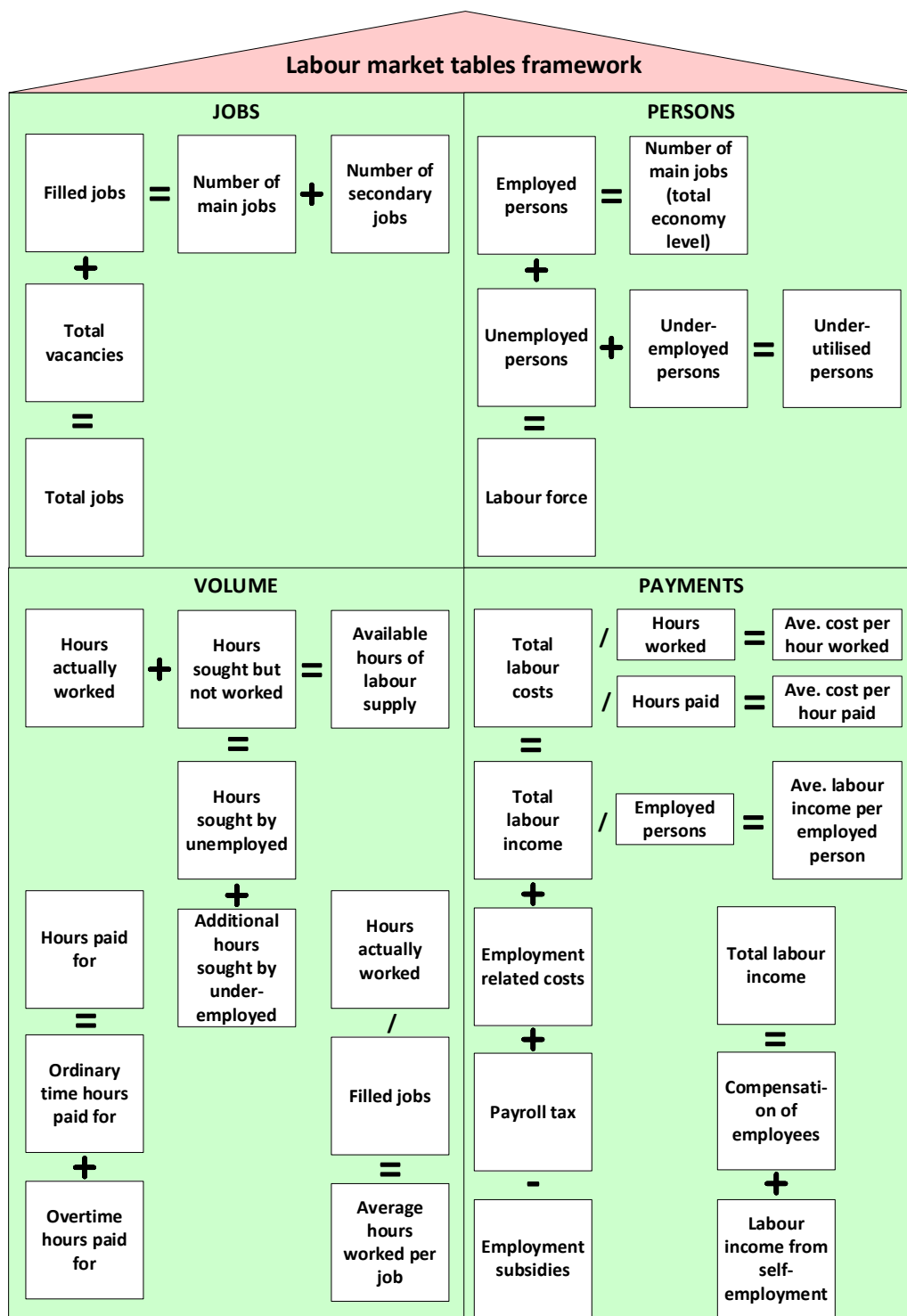
- To complete the picture of the labour force, it is necessary to mention unemployment because the labour force is divided between employed persons (that is, employees plus self-employed persons) plus those who are unemployed. An unemployed person is one who is not an employee or self-employed but available for work and actively seeking work. The concept of unemployed persons is not necessarily required in the national accounts because the unemployed do not contribute to production but their numbers are necessary to make the conceptual transition from the employed population to the economically active population.
- More details to add.

### **Volunteer labour**

- A distinction can be made between those who have an agreement to provide labour for insignificant remuneration or only income in kind, those for whom there is explicitly no remuneration, and those where there is apparently no remuneration but the workers benefit directly from the output to which they contribute. In ILO statistics, all three types of worker are included in the economically active population as employees. In the SNA, the remuneration of those working for insignificant amounts or only income in kind is measured by these costs.
- More details to add.

### III. Labour account framework

- This section will describe the overall structure of the labour account framework. The labour force consists of four groups of persons; residents who are employees of resident institutional units, residents who are employees of non-resident institutional units, unemployed residents and self-employed persons. (A self-employed person is necessarily associated with a resident household. If such a person provides goods and services abroad, these are recorded as exports.) Employment in the SNA is defined as all persons, resident and non-resident, both employees and self-employed persons, engaged in some productive activity that falls within the production boundary of the SNA and that is undertaken by a resident institutional unit.
- The Labour Account provides a conceptual framework through which existing labour market data from diverse sources can be confronted and integrated, with the aim of producing a coherent and consistent set of labour market statistics. These statistics will provide users with detailed information on various aspects of the labour market, linked to the information included in Supply and Use Tables (by industry), institutional sector accounts and other national accounts' tables.
- The Labour Account helps address data coherence by:
  - (a) bringing together related labour statistics from multiple sources in a single set of tables; and
  - (b) applying a consistent set of concepts across the data to generate comparable data and consistent data that can be compared with other data in the national accounts (aligning underlying micro data).
- The labour accounts consist of four quadrant tables: jobs, persons (both employees and self-employed), volumes (i.e., hours worked) and payments. The overall labour account identity relationship diagram is shown below.



- Accounting conventions are necessary to define the scope and treatment of activities that occur within the economy. The production and residency conventions adopted in the SNA are used in the Labour Accounts to determine the scope of activities covered, and the size of the economy being measured. The scope of the economy defined by these conventions embraces the activities of all enterprises

resident within the economic territory and engaged in the production of goods and services, which fall within the scope of the National Accounts production boundary.

- There will be reference to the possibility of extending the accounts to also include elements that go beyond the boundaries of the SNA such as the relevance of unpaid household activities (in terms of hours worked). Need to link to 2025 SNA Chapter 35 on Measuring well-being.
- It is important to note the items presented in the labour account need to be completely aligned with existing national accounts definitions where they currently exist and complement these existing definitions with additional items (such as those for filled and vacant jobs) to provide a more complete picture of the labour market.
- To provide completeness and comprehensiveness, the labour account brings together in one place concepts that in the current system of national accounts are presented across different accounts. These concepts are linked through a set of defined accounting identities and enable users to analyse the data through different economic perspectives such as payments from both an employer and employee perspective.
- There will be a brief explanation of what is covered in each of the four quadrants and why it is relevant, thereby also briefly explaining how it links to the other quadrants, and highlighting the main indicators that may be derived from the various quadrants.

### **Jobs**

- Individuals may have more than one source of income from employment because they work for more than one employer or, in addition to working for one or more employers, they work on their own account as self-employed. The agreement between an employee and the employer defines a job and each self-employed person has a job. The number of jobs in the economy thus exceeds the number of persons employed to the extent that some employees have more than one job. An individual with more than one job may do these successively as when the person works for part of the week in one job and the rest of the week in another or in parallel as when the person has an evening job as well as a daytime job. In some cases, too, a single job may be shared by two persons.
- More details to add, e.g., definition of a 'job', multiple job holders: main job and secondary jobs, and self-employed.

### **Persons (and employees)**

- Explicitly including persons within the sequence of accounts allows not just a more complete understanding of the labour force, it also allows us to bring in the demographic dimension. This provides an opportunity to move beyond an aggregate household view by providing insights into the experience broken down into educational and demographic groupings of interest such as: gender, age, educational attainment and ethnicity. This may also be relevant in linking the results to household distributional results (see for further information in 2025 SNA Chapter 32 on households).

- The size of the labour force is a measure of the total number of people of working age who are working, or actively looking for work - that is, the number of people employed and unemployed together as one group.
- More details to add, e.g., links to demographic concepts and nature of residence, link to ILO concepts and particularly labour force definitions, employed, underemployed, etc. Also, employees commuting between countries, especially in context of the labour force (domestic concept).

### **Labour volume**

- The Labour Volume quadrant describes the relationship between the hours of labour that are supplied by individuals and the hours of labour that are used by enterprises. It quantifies the number of hours actually worked by persons in all jobs. These data have a direct link to National Accounts and productivity statistics, as they are measures of labour input used in the production of goods and services.
- Measuring changes in the level of hours worked for different groups of employed persons (both self-employed and employees) is important to monitor working and living conditions, as well as analysing economic cycles. Information on hours of work enables various analytical insights such as: classification of employed persons into full-time and part-time status; the identification of underemployed persons; and the creation of high frequency (monthly or quarterly) aggregates on hours worked.
- More details to add, e.g., links to demographic concepts and nature of residence, link to ILO concepts and particularly labour force definitions, employed, underemployed etc.

### **Labour payments**

- The Labour Payments quadrant accounts for the costs incurred by enterprises in employing labour and the incomes received by people from their labour provision. It can be described as the cost of labour and reflects the interactions between labour supply (persons in the labour force), labour demand (jobs and employed persons), and labour volume (hours worked). This is one component of labour already quite well covered by the SNA and would be expected to be fully consistent with the measures already included within the National Accounts.
- More details to add, e.g., mainly linking back to discussion earlier in the SNA with the income accounts.

## **IV. Enhanced measures of labour inputs**

This section will discuss different types of labour market measures.

- A crude estimate of the labour inputs required for productivity measures is provided by the numbers of persons employed. Using this as a starting point, the labour input measures can then be adjusted to provide various degrees of sophistication. Examples in increasing order of measurement complexity are full-time equivalents, total actual hours worked and quality-adjusted labour inputs based on models. Each of these will be discussed in turn below or linked to other chapters like the QALI.



- Employment measured on a full-time equivalent basis
  - Full-time equivalent employment is the number of fulltime equivalent jobs, defined as total hours actually worked by all employed persons divided by the average number of hours actually worked in full-time jobs.
- Employee labour input at constant compensation
  - Total hours actually worked and full-time equivalent employment are both physical measures of labour input. Output too can usually be measured in physical terms, such as tonnes or cubic metres, but this is not done in the national accounts, because the basic value per tonne or cubic metres varies so much between products that these physical measures lack general economic significance. Compensation per hour or per full-time year of work varies enormously too. Physical measures of labour input are only valid if the mix of different kinds of labour is much the same in the different countries or at the different times examined. More text to add.

## V. Labour market data links to Supply and Use Tables (SUTs)

This section will describe linkages of the labour market data to SUTs.

The Supply and Use Tables provide a lot of detail by industry linking primary inputs to output and to final uses including the use of labour as an input. This presently covers compensation of employees and mixed income (including some informal production). Moreover, there is a need to have consistent and coherent information on numbers of employees, hours worked, etc. This information would also help to provide a quality assurance feedback loop using per head analyses or labour productivity.

The data sought after by industry is shown in the Supplementary Table part of the diagram below.

BALANCED SUPPLY AND USE TABLES - 2025 SNA (inclusion of depletion of natural resources) PLUS Supplementary Table on labour inputs										
Supply Table at purchasers' prices										
Products	Industries			Output at basic prices	Imports	Total supply at basic prices	Trade and transport margins	Taxes less subsidies on products	Total supply at purchasers' prices	
	Agriculture	Manufacturing and construction	Services							
Agriculture	270	30	50	350	20	370	28	20	418	
Manufacturing	6	380	87	473	42	515	80	21	616	
Construction	4	50	13	67	8	75	22	4	101	
Trade, transport and communication	10	15	210	235	7	242	- 130	13	125	
Finance and business services	6	17	240	263	11	274	15		289	
Other services	4	8	100	112	12	124	7		131	
Total	300	500	700	1 500	100	1 600	80		1 680	

Use Table at purchasers' prices										
Products	Industries			Final consumption expenditure	Gross capital formation	Exports	Total use at purchasers' prices			
	Agriculture	Manufacturing and construction	Services							
Agriculture	38	65	103	155	24	33	418			
Manufacturing	115	123	64	167	85	62	616			
Construction	12	16	6	24	39	4	101			
Trade, transport and communication	21	2	2	98	1	1	125			
Finance and business services	14	54	43	128	32	18	289			
Other services	14	35	23	41	10	8	131			
Total intermediate consumption	214	295	241	613	191	126	1 680			
Compensation of employees	10	100	300				410			
Other taxes less subsidies on production	- 15	10	15				10			
Consumption of fixed capital	17	31	35				83			
Depletion of natural resources	14	29	4				47			
Net operating surplus / Mixed income	60	35	105				200			
NVA	55	145	420				620			
GVA	86	205	459				750			
Output at basic prices	300	500	700							

Supplementary Table on labour inputs										
Number of hours worked										
Number of FTEs										
Number of employed persons										
Number of unemployed persons										
Number of filled jobs										
Number of vacancies										

There will be more discussion on the link of the labour input data with the primary inputs covering issues such as the guidelines bringing different data from different sources (e.g., business surveys, household surveys, admin data) together.

## VI. Specific issues

Other issues that will be covered in this section:

- Non-observed economy.
- Paid and unpaid household services.
- Imputed labour costs (allocating SEI to CoE and GoS).
- Occupation SOC links.

## VII. Labour and labour accounts links to education, training and human capital

This section will briefly cover extensions linking to concepts related to education, training and human capital.

Labour accounts are quite distinct from education and human capital, although a link could be made to measuring human capital as representing the stock measure of the (available) 'labour' capital. In that case, we may need an additional bullet point introducing the link to the labour accounts and the relevance of obtaining estimates of human capital in understanding (future) labour market (developments). This may then also be linked up to extended accounts for education and human capital, to be covered in 2025 SNA Chapters 34 on Measuring well-being and Chapter 35 on Measuring sustainability, and linking gender, age, skills, etc. extensions.

To note, labour productivity and capital services will be left to the productivity chapter.

### Schematic Overview

I	Introduction
II	Types of labour Employees Self-employed Unemployment Volunteer labour
III	Labour account framework Jobs Persons (and employees) Labour volume

	Labour payments
IV	Enhanced measures of labour inputs
V	Links to Supply and Use Tables (SUTs)
VI	Specific issues
VII	Labour and labour accounts links to education, training and human capital

**Questions for the Advisory Expert Group on National Accounts (AEG)/IMF Committee on Balance of Payments Statistics (Committee)**

- 1) Does the Committee and the AEG have any suggestions on the draft outline of the chapter?
- 2) Does the Committee and the AEG agree with the proposed structure and coverage of topics in the chapter presented in this outline?
- 3) Does the Committee and AEG agree with the title of the chapter, 'Labour' to reflect the scope proposed in this annotated outline and the fact the framework is based on tables and does not have natural balancing items that underpin an account.

**References**

- GN WS.4 and the note on the Outline of the 2025 SNA.
- SNA
- BPM
- Labour Account Australia methodology, March 2022 | Australian Bureau of Statistics (abs.gov.au)
- Employment; economic activity, quarterly, National Accounts (cbs.nl)
- Labour market accounts - Statistics Denmark (dst.dk)
- Labour Market Accounts (LMA) - Federal Statistical Office (admin.ch)
- Article1996-3 (ilo.org)
- Article 2002-2 (ilo.org)
- UNECE Handbook on forms of employment

**Key Stakeholders Consulted**

- Labour Accounts Workstream
- SNA editors