

Links and differences between Social Protection statistics (ESSPROS) and National Accounts

METHODOLOGICAL ASPECTS
AND CONCEPTUAL BRIDGE TABLES

2021 edition



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Introduction

Since 1981, the statistical methodology underlying the European System of Social Protection Statistics (ESSPROS⁽¹⁾) has been conceived to be consistent with the national accounts methodology, so as to provide granular data on social protection in the broader picture of an economy as provided by the national accounts. This is an approach in line with the *satellite accounts* recommended by ESA 2010. ESA 2010 presents a satellite account for social protection, referring to ESSPROS detailed data presentation, in chapter 22 (§§22.110-22.122).

Consistency of social protection satellite accounts data with macroeconomic indicators is very important for users in various contexts, including policy making and monitoring. Consistency, however, should not be interpreted as suppressing specificities of satellite accounts, but rather as giving users the possibility to reconcile related macroeconomic indicators (at a certain desired level of aggregation) with comparable aggregates for which detailed data are available from satellite accounts. Comparability of aggregates requires taking into account the impact of differences in definitions, coverage and accounting approaches.

In the case of social protection statistics, this concerns mainly *social benefits* and *social contributions*, for which national accounts provide data according to their own general definitions and classifications and ESSPROS statistics give detailed breakdowns on various additional characteristics. Further, ESSPROS records separately the expenditure for carrying out the provision of social benefits as *administration costs* of social protection schemes. In ESSPROS, social protection expenditure covers interventions providing social benefits *from public and private schemes*, intended to relieve households and individuals of the burden of a defined set of *social risks* or needs. The social needs considered are associated with *sickness and healthcare, disability, old age, survivors, family/children, unemployment, housing and social exclusion not elsewhere classified*⁽²⁾. Social protection benefits include pensions and other benefits. The system also records social contributions receipts according to a specific classification, as well as other types of receipts of social protection schemes.

ESA 2010 (§22.121) well explains the advantages that may derive from the analysis of conceptual and operational links between social protection statistics and national accounts: “The close linkage between standard national accounts statistics and social protection statistics provides opportunities for both types of statistics. From the point of view of social protection statistics, they can be related to the official statistics on the national economy such as on economic growth and public finance. National accounts statistics broken down by social protection scheme can also serve as a check on the completeness and reliability of social protection statistics. The compilation processes of both statistics can also be linked, saving compilation costs, increasing reliability and providing new opportunities, such as making social protection statistics as timely as national accounts statistics. Similar advantages apply to the national accounts. The accounts for social protection are relatively easy to derive from the sector accounts and the table on government expenditure by COFOG function and are used in forming economic and social policy. Furthermore, they serve as a check on the reliability and completeness of the standard national accounts figures, such as social benefits and contributions”.

(1) The methodology for social protection statistics is contained in the European system of integrated social protection statistics (ESSPROS) Manual and users' guidelines, ed. 2016. The first manual on ESSPROS methodology was published in 1981. The manual was subsequently updated several times and the last edition was published in 2019.

(2) The scope of social protection in ESSPROS and the recording of administration costs are covered more in detail in section 3.1.

Clearer linking of ESSPROS with national accounts - in terms of conceptual differences and overlaps, and of their impacts on data - is therefore on the one hand a requirement of users who seek overall consistency between social protection statistics and macroeconomic statistics.

On the other hand, a better integration of data sources and of data processing in overlapping areas provides opportunities for quality improvements and efficiency gains in statistical production, as well as a framework to produce timelier, though less detailed, indicators for social protection that are at the same time consistent with related national accounts aggregates. This conceptual analysis may support users wishing to relate data from social protection statistics and national accounts. It may also be useful for statisticians aiming at developing or improving social protection statistics, national accounts and their integration.

2

Approach and structure

This working paper systematically compares the methodology of social protection statistics with the national accounts methodology in order to describe how social protection statistics relate to national accounts on various conceptual dimensions. Correspondences are established for expenditure and receipts transactions, together with an explanation of the main reasons for deviations.

For national accounts, the reference methodology is the European System of Accounts (ESA)^(†) of 2010. For Social Protection accounts, the reference methodology is the ESSPROS Manual^(‡).

ESSPROS social protection statistics focus primarily on *expenditure* for social benefits and on how they are financed by the *receipts* of social protection schemes, with social contributions being the most characteristic type of receipts.

In national accounts, social benefits (including pensions and other benefits) and social contributions are recorded among distributive transactions, in the secondary distribution of income account, which is treated mainly in chapter 4 of ESA 2010. A particular case are social transfers in kind, which are directly connected with government and non-profit institutions final consumption expenditure. Chapter 17 of ESA 2010, on pensions, is also relevant for social protection. Finally, chapter 22 of ESA 2010, on satellite accounts, contains a part on social protection satellite accounts drawing from ESSPROS accounting presentation.

Section 3 of this working paper reviews the main concepts used by the two accounting systems and contains a summary presentation of general conceptual differences. It also introduces the main tool used for the following analysis, namely *conceptual bridge tables* presenting the relations between the flows analysed.

The following sections 4 (for *expenditure* transactions) and 5 (for *receipt* transactions) develop specific bridge tables to guide readers into social protection classifications and terminology, compare them with those used in national accounts and analyse in more detail links and differences for the most important social protection transactions.

^(†) See Overview - ESA 2010 - Eurostat (europa.eu).

^(‡) See European system of integrated social protection statistics ESSPROS — 2019 edition - Products Manuals and Guidelines - Eurostat (europa.eu).

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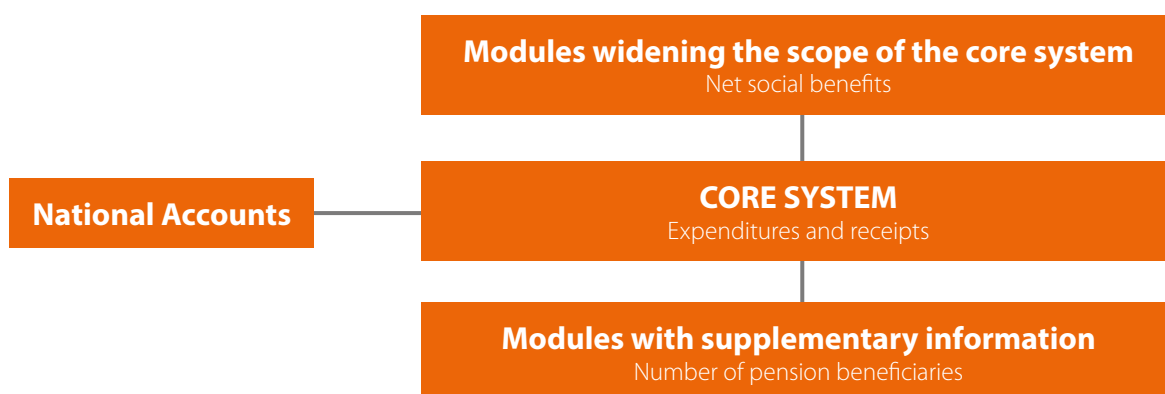
Overview of links and differences related to coverage and to general accounting elements

The ESSPROS Manual gives the following schematic representation of the links between social protection statistics and national accounts (see figure 1). The “core system” contains detailed breakdowns of expenditures and receipts of social protection schemes. Aggregated expenditures and receipts of social protection schemes are also recorded in national accounts as a subset of distributive transactions. This is represented in figure 1 by the line connecting national accounts and ESSPROS core system.

The ESSPROS modules represented in the upper and lower rectangles of figure 1 contain supplementary statistical information on particular aspects of social protection, either widening the scope considered or providing information that supplements the core data, such as non-monetary data on the number and characteristics of social protection beneficiaries. Currently included in ESSPROS are modules covering:

- Net social protection benefits, measuring the influence of fiscal systems on social protection benefits, through taxes and social contributions payable on benefits by the beneficiaries.
- The number of pension beneficiaries, with breakdown by function of expenditure and gender of beneficiaries.

Figure 1 – ESSPROS Core System, links with national accounts and supplementary modules



Social protection statistics produced according to the ESSPROS methodology provide a comprehensive and coherent description of social protection interventions, covering social benefits and their financing, in a way that is harmonised with the national accounts main concepts.

In particular, the definitions of the main transactions (social benefits and social contributions) are generally aligned with those of national accounts. However, some conceptual differences do exist and they are dealt with in section 4 (for social benefits) and in section 5 (for social contributions) of this working paper.

An important defining characteristic of social protection is the “collective” organisation of the schemes, which means that are excluded insurance policies covering the same risks included in social protection, but based on the individual initiative and on the personal risk-exposure of the insured (see 3.2 below). National accounts similarly distinguish social insurance and individual insurance.

The main general difference concerns the *scope* considered, i.e. the types of social risks or needs that are covered by social benefits in the two statistics. ESSPROS limits social protection benefits to interventions in eight functions, while national accounts record social benefits also for interventions in functions not covered in ESSPROS, in particular education (see 3.1 below).

A second general difference is related to the *statistical unit*: the *institutional unit* in national accounts and the *social protection scheme* in ESSPROS (see 3.2 and 3.3 below).

Thirdly, the *accounting principles* used in ESSPROS for recording expenditure and receipts are generally derived from the national accounts, as presented in 3.4. There is therefore strong consistency in the accounting approach. However, national accounts are a more complex accounting framework covering all aspects of an economy and some national accounts categorisations are not relevant for social protection⁽⁵⁾. In some cases, accounting systems may decide to “rearrange” transactions for specific analytical purposes, which may be the source of further differences⁽⁶⁾.

3.1. Social risks or needs covered: definition of social benefits and scope of interventions

In national accounts, §4.83 of ESA 2010 gives the following definition of social benefits: “social benefits are transfers to households, in cash or in kind, intended to relieve them from the financial burden of a number of risks or needs, made through collectively organised schemes, or outside such schemes by government units and NPISHs⁽⁷⁾”. ESSPROS definitions of social protection and social benefits refer to the same elements, often using the same wording of ESA⁽⁸⁾. Relief from the financial burden of social risks or needs is at the heart of social protection as defined in §16 of part I: “Social protection encompasses all interventions from public or private bodies intended to relieve households and individuals of the burden of a defined set of risks or needs, provided that there is neither a simultaneous reciprocal nor an individual arrangement involved”.

The absence of a “simultaneous reciprocal arrangement” marks in particular the distinction between social benefits paid to employees, on the one hand, and employees’ wages and salaries, on the other hand. Any expenditure by employers for the employees’ benefits that can be regarded as compensation (in cash or in kind) for work should be not considered as a social benefit⁽⁹⁾. Where the *reciprocal arrangement is not simultaneous*, the expenditure is classified as social benefit. The continued payment of wages while an employee is unable to work during sickness, maternity, accident, disability, redundancy is therefore included in social benefits and not in wages; payments to employees of allowances for dependent children and other family members are also social benefits, as well as health care *not* related to the nature of the work⁽¹⁰⁾.

The *scope* of risks covered by social benefits is narrower in social protection statistics than in national accounts. In ESSPROS, it is defined conventionally to include eight social risks or needs that are also referred to as function of social protection (see the list of functions in the rows of table 1).

⁽⁵⁾ For example, the national accounts distinction between current and capital transfers does not apply to social protection statistics, which focus on distributional aspects and do not consider capital accumulation.

⁽⁶⁾ A well-known example of rearrangement of transactions in national accounts, linked to the social protection domain, is the rerouting of employers’ social contributions (see sections 3.5 and 4 for more detail).

⁽⁷⁾ Non-profit institutions serving households.

⁽⁸⁾ See in particular ESSPROS Manual part I, §8 and §16.

⁽⁹⁾ See ESSPROS Manual §24A and ESA 2010 §4.05. Examples of these expenditures are: cost of living and expatriation allowances; allowances for transport to and from work; payments made by employers to their employees under saving schemes; free housing or housing allowances to active employees; crèches for the children of employees; holiday pay; sport, recreation and holidays facilities for employees and their families.

⁽¹⁰⁾ See ESSPROS manual §25 and ESA 2010 4.07 b) and c). Allowances for education of dependent children are nevertheless included in national accounts social benefits and excluded from ESSPROS social protection benefits.

ESA 2010 §4.84 delimits a wider scope for social benefits, which contains the same⁽¹⁾ risks or needs of ESSPROS but also *education*. Furthermore, ESA 2010 §4.110 includes in social transfers in kind individual goods and services provided by government and NPISHs in *recreation, culture and sport*⁽²⁾.

Table 1 presents a comparison between the scope of *social protection* in ESSPROS (rows) and that of *social benefits* in national accounts (columns) illustrating the various elements mentioned above.

Table 1 – Scope of social benefits in social protection (ESSPROS) and in national accounts

National accounts ESSPROS	(a) sickness	(b) inva- lidity, disabil- ity	(c) occupa- tional acci- dent, disease	(d) old age	(e) survi- vors	(f) mater- nity	(g) family	(h) promo- tion of emp- loy- ment	(i) unem- p- loy- ment	(j) housing	(k) educa- tion	(l) general needi- ness	Social benefits in other func- tions (*)
1. Sickness/Health care													
2. Disability													
3. Old age													
4. Survivors													
5. Family/children													
6. Unemployment													
7. Housing													
8. Social exclusion nec													

(*) Include social transfers in kind in sport, culture and recreation and social benefits other than social transfers in kind in any other function

3.2. Social vs. individual insurance, collective schemes and social solidarity

As it emerges from the definitions quoted above, the collective organisation of the interventions is an essential requisite, both in ESSPROS and in national accounts, to qualify expenditure as social benefits.

ESA 2010 §4.83 refers first of all to interventions made through *collectively organised schemes*. Outside such schemes, social benefits can be provided by government units and NPISHs only. In national accounts, the collective organisation of the scheme distinguishes *social* from *individual* insurance. This distinction is significant in practice, in particular for pensions and for health insurance. Specifically, ESA 2010 §4.86 excludes from social benefits: (a) insurance claims based on policies taken out solely on the own initiative of the insured, independently of his employer or government; (b) insurance claims on policies taken out with the sole purpose of obtaining a discount, even if those policies follow from a collective agreement⁽¹³⁾.

However, a definition of collective organisation of a scheme is not given in ESA 2010. The collective schemes referred to in relation to social benefits by ESA 2010 §4.83 are the social insurance schemes defined in §4.88 (see 3.3 below), but ESA 2010 does not provide an operational criterion to allocate insurance policies between social and individual insurance.

⁽¹⁾ The risks "occupational accidents and disease", "promotion of employment" and "general neediness" mentioned in ESA 2010 §4.84 correspond to functions included in the 1981 edition of the ESSPROS Manual. The benefits belonging to these "1981 ESSPROS functions" have been integrated in the eight current functions of ESSPROS with the 1996 edition of the Manual. See for example as references §7 and §64 of part II of the ESSPROS Manual.

⁽²⁾ It should also be mentioned that in practice, in some countries, national accounts record "social benefits other than social transfers in kind" also in other functions than those listed in table 1. This is indicated in the last column and footnote of table 1. These elements should also be considered in practical data comparisons together with the social benefits in education mentioned in ESA 2010 §4.84. In a smaller number of country cases, national accounts do not record social benefits other than social transfers in kind except for the functions corresponding to ESSPROS. Current transfers in cash related to education or other functions may thus be recorded in *other current transfers*.

⁽¹³⁾ ESSPROS Manual §30 of part I, referring to the same case of collective agreements, mentions the example of a joint sickness policy covering a group of people travelling together, which is not to be considered social protection although addressing a risk (sickness) included in the social protection scope.

The ESSPROS Manual treats along similar lines the borderline between social protection and individual insurance (see §§28-32A of part I), but introduces in addition *social solidarity* as the main criterion for including insurance policies in social protection. Social solidarity means that, as a matter of social policy, the *contributions charged are not proportional to the individual exposure to risk of the people protected*⁽¹⁴⁾. The ESSPROS criterion of social solidarity gives an operational guidance to compilers for classifying insurance policies between social and individual insurance.

3.3. Social insurance schemes (national accounts) and social protection schemes (ESSPROS) compared

In national accounts, social benefits can be provided to households by social insurance schemes or by government units and NPISHs (ESA 2010 §4.83). §4.85 of ESA 2010 introduces an important difference between these two channels of provisions: social insurance schemes receive *social contributions*, while benefits provided by government units and NPISHs are not conditional on previous payments of social contributions.

Social insurance schemes are generally defined by ESA 2010 in §4.88 and in §17.01. In social insurance schemes, “participants are obliged, or encouraged, by their employers or by general government, to take insurance against certain social risks or circumstances that may adversely affect their welfare or that of their dependants. In such schemes social contributions are paid by employees or others, or by employers on behalf of their employees, in order to secure entitlements to social insurance benefits. Contributions to social insurance schemes can also be paid by, or on behalf of, self-employed or non-employed persons”.

Social benefits provided outside social insurance schemes are further specified in ESA 2010 §4.85 (c) as “current transfers, by government or NPISHs, which are not conditional on previous payments of contributions and are generally linked to an assessment of income. Such transfers are generally known as social assistance”. In addition, §17.11 of ESA 2010 includes in social benefits the provision of health and education services to all members of the community without requiring participation in a scheme or other qualifying requirements. These are treated as social transfers in kind by government or NPISHs.

Social insurance schemes are also treated in more detail in chapter 17 of ESA 2010, in particular with regard to pensions⁽¹⁵⁾. ESA 2010 subdivides social insurance schemes into *social security schemes* (which are controlled by government and broadly correspond to the government subsector *social security funds*) and *other employment-related social insurance schemes* (see table 2 below). As indicated in table 2, social insurance schemes organised by government units for their own employees (as opposed to the working population at large) are classified as other *employment related* schemes and not as *social security* schemes (see ESA 2010 §4.90). The remaining forms of intervention with social benefits are *social assistance* and *social transfers in kind*.

In ESSPROS, a *social protection scheme* is a more extensive concept defined as “a distinct *body of rules*, supported by one or more institutional units, governing the provision of social protection benefits and their financing” (ESSPROS Manual part I, §42). ESSPROS Manual part I, §44 clarifies that the body of rules “may be established de jure, by virtue of laws, regulations or contracts, or de facto, by virtue

⁽¹⁴⁾ See §31 of part I of the ESSPROS Manual. However, §32 specifies that also social solidarity is not an absolutely necessary condition for an insurance scheme to be classified as a scheme of social protection. Two other cases of insurance are in any case admitted in social protection: (i) where by law or regulation certain groups of the population are obliged to participate in a designated insurance scheme; (ii) where employees and their dependant are insured as a consequence of collective wage agreements.

⁽¹⁵⁾ The concepts of social insurance, social security and social assistance were already defined in the ESA 1979 and 1995 editions. ESA 2010 includes a new chapter 17 on *Social insurance including pensions* that did not exist in previous ESA editions and provides additional classifications and accounting examples for social insurance schemes. In the ESA 1995, social insurance schemes were treated in Annex III.

of administrative practice”⁽¹⁶⁾. Social protection schemes therefore cover all types of national accounts intervention channels, collective national accounts schemes as well as government and NPISHs direct interventions in the forms of social assistance and social transfers in kind.

The ESSPROS Manual (chapter 4) further classifies social protection schemes into five groups, according to the following characteristics: decision-making, legal enforcement, establishment of entitlements, scope and level of protection. See rows in table 2, which provides an overview of the links between the two systems of classification.

Table 2 – ESSPROS groups of schemes compared with forms of social benefits provision in national accounts

National accounts ESSPROS groups of schemes		Social insurance schemes		Social assistance and social transfers in kind ^(*)	
		Social security schemes (Social security funds S.1314)	Other employment related (any sector, incl. other S.13)	General government (S.13)	NPISHs (S.15)
1. Decision-making	Government-controlled schemes				
	Not government-controlled schemes				
	schemes for employees				
	other not-gov controlled schemes				
2. Legal enforcement	Compulsory				
	Non-compulsory				
3. Establish. of entitlements	Contributory				
	Non-contributory				
4. Scope	Universal				
	General				
	Special		including public servants		
5. Level of protection	Basic				
	Supplementary				

(*) Health services, see ESA 2010 §17.11 (excluding education)

3.4. Statistical units

Statistical units are the units to which the data refer and those used in ESSPROS and in national accounts are different. The statistical unit in the ESSPROS is the *social protection scheme*. In national accounts, the statistical unit for distributive transactions is the *institutional unit*. The institutional unit is characterised by decision-making autonomy and either keeps a complete set of accounts, or is able to compile a complete set of accounts (ESA 2010 §2.12). On the other hand, social protection schemes should meet the weaker condition that it must be possible to draw up a separate account of receipts and expenditures (ESSPROS Manual part I §42), but are not necessarily characterised by decision-making autonomy.

Preferably, social protection schemes are chosen in ESSPROS in such a way that they provide protection against a single risk or need and cover a single specific group of beneficiaries. However, this could easily lead to produce a multitude of schemes and this tendency to fragmentation is balanced by the need

⁽¹⁶⁾ According to the ESSPROS Manual social protection schemes are preferably chosen in such a way that their expenditures provide protection against a single risk or need and cover a single specific group of beneficiaries (see part I, §42 (ii)). Regarding schemes' receipts, ESSPROS includes also imputed receipts as in the case of social assistance schemes (which are financed implicitly through imputed government contributions) and of non-autonomous schemes run by employers (which draw on imputed employers' contributions - see ESSPROS Manual, part I §45, second paragraph).

to compile both receipts and expenditures in order to define a social protection scheme. In practice, therefore, many schemes provide benefits that come under different functions⁽¹⁷⁾.

The ESSPROS Manual further clarifies the possible links and differences between social protection schemes units and national accounts institutional units, in particular in part I, §43:

“Social protection schemes are concerned exclusively with redistribution and not with production. They are supported by institutional units and are not themselves institutional units.

Some institutional units support social protection schemes as their main activity; for example, social security funds, pension funds, welfare funds or mutual benefit societies. Others run social protection schemes only as a subsidiary activity; for example, employers, insurance companies or trade unions.

Goods and services provided in kind to beneficiaries are considered to be produced by the institutional unit (or units) which support the scheme in question, or else to be purchased from other institutional units.”

Of specific importance are the cases in which there is not a one to one correspondence between ESSPROS-defined social protection schemes and national accounts institutional units. These are considered in the last paragraph of ESSPROS Manual §43:

“Institutional units can support *more than one* social protection scheme, when they administer and provide very diverse types of social benefits. On the other hand, a single social protection scheme can be supported by *several institutional units*, where each is responsible for, say, a specific geographic region, group of enterprises or category of workers.”

The first case, where one institutional unit supports more than one scheme, implies that the *transactions between the schemes supported by the same institutional unit* are not recorded in national accounts but only in ESSPROS. In addition, transactions between schemes supported by institutional units belonging to the same sector (or to the same sub-sector of general government), are not recorded in consolidated ESA 2010 tables. This may refer in particular to ESSPROS *transfers between schemes and rerouted social contributions*, although it cannot concern social benefits (see section 4 below).

The second case, a social protection scheme supported by more than one institutional unit, may imply that the transactions of the scheme should be attributed to more than one *institutional sector*, if the units that support the scheme belong to different sectors according to the national accounts definitions. In particular, the allocation by sector of origin of social protection benefits and the comparison with national accounts data by sector may be problematic.

3.5. Accounting structure, principles and conventions

The national accounts system records transactions, stocks and other flows for all sectors of an economy. Sectors are groups of institutional units with a similar type of economic behaviour. National accounts present transactions in a sequence of accounts and of balancing items which describe production, distribution and final uses of resources. The distinction between current and capital transactions plays a central role, with accumulation accounts providing the link between flow accounts and balance sheets.

ESSPROS only records the *distributive transactions* that are included in its scope and the *administration costs* of social protection schemes⁽¹⁸⁾. Any receipts or expenditures relating to production activities (for instance, the production of administration services or of goods and services for direct provision to

⁽¹⁷⁾ See ESSPROS manual §§42 and 46.

⁽¹⁸⁾ The ESSPROS Manual does not define distributive transactions, which in national accounts are defined as transactions distributing value added and transfers redistributing income and wealth (ESA 2010 §4.1).

beneficiaries) are excluded. Likewise, no financial transactions by the scheme (such as the issue of a loan or bonds) are recorded.

The main accounting distinction in ESSPROS is between *expenditures* and *receipts* of the resident social protection schemes, with a presentation that is similar to that of Government Finance Statistics rather than to the sequence of accounts ESA presentation⁽¹⁹⁾. The central category of ESSPROS expenditure is social benefits and the central category of receipts is social contributions, but the system also records other categories of expenditures and receipts related to social protection.

ESSPROS does not consider investment, accumulation accounts and balance sheets, so that the distinction between current and capital transactions is not relevant. However, this also means that national accounts *capital* transfers, as well as *current* transfers, are recorded in ESSPROS if they meet the relevant definitions of social protection expenditure or receipt.

In general, ESSPROS⁽²⁰⁾ has adopted the accounting rules of the national accounts for recording of transactions, in particular as concerns *valuation* and *time of recording*.

Therefore, for cash transactions, there is no difference arising from valuation aspects. Some specific valuation issues may however be relevant for benefits in kind. In both systems, the national accounts valuation approach for a benefit in kind is followed, so that those produced by market units are valued at market price and those produced by non-market units are valued at the sum of their costs of production⁽²¹⁾. The costs elements considered in ESSPROS are derived from national accounts: compensation of employees, intermediate consumption, consumption of fixed capital and other taxes less other subsidies on production (see ESA 2010 §3.49).

However, although the valuation principles coincide, it is possible that in practice there can be differences if valuations for benefits in kind are made by different compilers. This refers in particular to the consumption of fixed capital component, which is also determined by accounting conventions and modelling of the residual life of fixed assets. Concerning all costs components, there can also be differences in the delimitation of costs that are taken into account. This can be related to general issues such as the allocation of overhead costs, or be specific to ESSPROS compilation in relation with the distinction between benefits in kind and administration costs.

For *time of recording* of transactions, ESSPROS applies the national accounts *accrual* principle (as opposed to the *cash* principle).

Finally, accounting differences may also arise if corresponding transactions are *rearranged*, as compared to the actual flows as recorded by the parties involved⁽²²⁾. In the area of social protection, in national accounts, this mainly concerns the treatment of employers' social contributions, which are generally recorded as though they were paid by employers to households and then by households to the scheme, rather than directly by the employers to the scheme. ESSPROS records employers' social contributions as receipts of the social protection scheme from the sector of the employer. In addition, in the case of specific reductions in employers' social contributions financed by the government, national accounts record social contributions as paid at full value by the employers and a subsidy on production from government to employers equal to the specific reduction. ESSPROS records receipts of employers' social contributions for the amount paid by the employers, net of the specific reduction⁽²³⁾.

In ESSPROS, rearrangements are also used, but they are adapted to the ESSPROS context and practical results may not coincide. "Recognising the principal party" is explained in the ESSPROS Manual §137-139. "Re-routing" is applied in ESSPROS to social contributions payable by a scheme to another scheme for the benefit of protected persons (ESSPROS Manual part I §82). This is different from the re-routing of employers' social contributions in national accounts just mentioned above. In ESSPROS "partitioning" may

⁽¹⁹⁾ For the Government Finance Statistics presentation, see ESA 2010 §§20.68-20.110.

⁽²⁰⁾ See ESSPROS Manual I, chapter 8 on accounting conventions and appendix V for the differences with national accounts (ESA 2010). Also relevant is appendix VI of the ESSPROS Manual, on the classification in ESSPROS of various government disbursements.

⁽²¹⁾ More specific differences in valuation may concern social benefits in the housing function, where ESSPROS uses in some cases the difference between actual rent and a reference rent price to evaluate the benefit. These are not considered in this working paper.

⁽²²⁾ *Rearrangement* of transactions is described in ESA 2010 §§1.72-1.78. It refers to three possible cases: *rerouting*, *partitioning* and *recognising the principal party to a transaction*.

⁽²³⁾ For social contributions, see section 5 of this working paper.

happen when one transaction from a scheme to a household, representing a *multifunction* social benefit, is split by function in the ESSPROS accounts. ESSPROS *administration costs* could also be interpreted as an ESSPROS-specific partitioning of costs that is not applied by the national accounts.

3.6. Summary of main differences

The various sources of differences between ESSPROS and national accounts analysed in this chapter can be summarised as follows:

- ESSPROS does not record any production activity and provides detailed data for a certain subset of *transfers* that in national accounts are recorded among distributive transactions.
- Besides *distributive transactions* (expenditure and receipts), ESSPROS also separately records, as expenditures, *administration costs* charged to the scheme (ESSPROS Manual, part I, §36).
- ESSPROS has adopted a definition of social protection limited to interventions in eight functions: sickness/health, disability, old age, survivors, family/children, unemployment, housing and social exclusion not elsewhere classified. National accounts social benefits cover a wider scope of interventions, including education, culture, sport and recreation.
- There is a substantial overlap between the two systems as concerns the distinction between social and individual insurance and the notion of collective schemes. However, ESSPROS *social protection schemes* are defined for any type of intervention falling in the ESSPROS scope and represent the statistical units of the system. In national accounts, *social insurance schemes* are defined for certain types of interventions only and do not necessarily coincide with the statistical units.
- ESSPROS general definitions of social benefits and social contributions are derived from national accounts and the accounting principles are also generally the same. However, in national accounts social benefits and contributions are parts of a more general system and certain accounting choices – such as the re-routing of employers' social contributions – may be the source of differences.

3.7. Cross-classification of transactions and conceptual bridge tables

The next step of the analysis presented in this working paper is to consider in more detail the various transactions according to the respective categories and classifications of ESSPROS and of the national accounts, and construct *bridge tables* between them.

This approach provides, first of all, an overview of the field covered by ESSPROS in the general context of the economy as represented in national accounts and can be used as dashboard for the conceptual analysis of the links and of the differences at a finer level⁽²⁴⁾.

A second set of uses concerns data analysis, quality checks and data estimation. This type of application clearly requires not only working on conceptual links, but using the data produced by the two systems, at a certain level of detail. Marginal totals may be used to define accounting constraints which can serve as validation or estimation tools, for example in order to make cross comparisons, check the adjustments for known differences, detect and classify the sources of (possibly all) discrepancies. Often, in practice, sufficiently detailed breakdowns are not available from published data and more detailed analysis should be carried out by national data compilers.

⁽²⁴⁾ Several more specific issues, borderline cases and case studies have been discussed in the various Eurostat technical groups related to ESSPROS. The most important results are collected in the *Compendium of methodological clarifications — ESSPROS: European system of integrated social protection statistics — 2021 edition - Products Manuals and Guidelines - Eurostat (europa.eu)*.

In the rest of this working paper the conceptual interpretation of the bridge tables is further developed for social protection expenditures and receipts. Tables are presented with the vertical dimension used for ESSPROS classifications and the horizontal dimension for national accounts classifications.

More specifically, the presentation looks at the various issues from the point of view of ESSPROS, so that the main objective of the exercise is *to isolate as much as possible the national accounts sub-items where the ESSPROS transactions listed on the vertical dimension are to be recorded according to the national accounts methodology.*

Each cell of the table contains the transactions that are conceptually classified in the two classes that intersect in that cell. Some combinations can be excluded a priori, which is represented by empty cells. If the two classifications had a one to one correspondence, non-empty cells could be arranged on the main diagonal of the table. In practice, one finds correspondences between partially overlapping classifications in which each item (row or column) of one classification corresponds to a small number of items of the other classification.

Section 4 contains an analysis of the various *expenditure* transactions recorded in ESSPROS and aims to identify their recording in the national accounts methodology. Section 5 applies the same approach to social protection *receipts*.

4

ESSPROS expenditures and correspondences with national accounts flows

In national accounts any non-financial transaction is recorded both as a *use* of the institutional unit and sector for which the transaction is payable and as a *resource* of the institutional unit and sector for which the transaction is receivable. For example, social benefits are recorded as uses of the resident units granting the benefits and as resources of households or of the rest of the world⁽²⁵⁾. Data on the expenditure of the resident social protection schemes are collected without distinction between resident and non-resident beneficiaries⁽²⁶⁾. Therefore, in looking for correspondences between ESSPROS *expenditures* and the national accounts, the most relevant national accounts transactions are recorded among the *uses of resident units*⁽²⁷⁾.

As mentioned already, ESSPROS records only *distributive transactions* (expenditures and receipts) and *administration costs* (expenditure). National accounts records social benefits and social contributions in the *secondary distribution of income* account that has disposable income as balancing item. However, other kinds of distributive transactions that feature in national accounts *primary* distribution of income account, such as property income, are also recorded in ESSPROS. For administration costs establishing correspondences is less straightforward (see below).

4.1. Bridge table for social benefits and other expenditure categories

As shown in figure 2 below, the central category of expenditure in ESSPROS is *social protection benefits*, defined as transfers to households, in cash or in kind, intended to relieve them from the financial burden of a number of risks or needs (ESSPROS Manual, part I §8). Most of the ESSPROS methodology concerns detailed classifications of social benefits, as presented in particular in part II of the ESSPROS Manual.

Besides social benefits, ESSPROS records three other kinds of expenditures, namely *administration costs*, *transfers to other schemes* and, as a residual category, *other expenditure*, as illustrated in the upper part of figure 2.

The lower part of figure 2 gives a similar general view of the position of the ESSPROS-related expenditure transactions in national accounts. *Social benefits* are part of distributive transactions (first blue box to the left). As described in 3.1 above, social benefits in national accounts cover a larger set of social risks or needs. In addition, they include part of what in ESSPROS is recorded as administration costs.

⁽²⁵⁾ Social transfers in kind with the rest of the world are by convention recorded in national accounts as social benefits other than social transfers in kind (see ESA 2010, §4.111), while ESSPROS does not follow this convention (see for example Appendix V of the ESSPROS Manual). This conceptual difference may be relevant for some countries when comparing data of ESSPROS *benefits in kind/benefits in cash* with national accounts *social transfers in kind/social benefits other than social transfers in kind*, respectively. Total social benefits are however not affected by this different convention.

⁽²⁶⁾ This distinction is given by some countries on a voluntary basis.

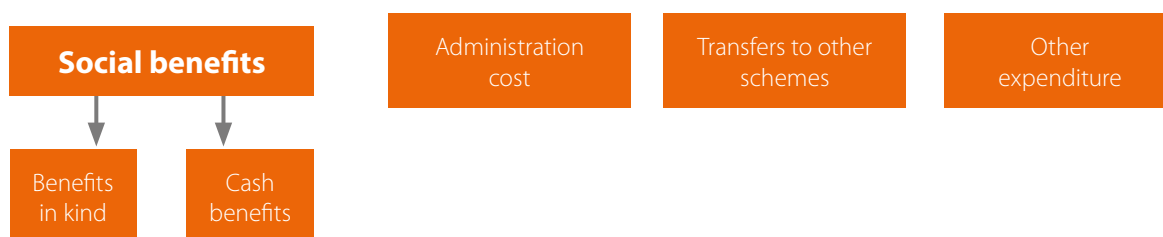
⁽²⁷⁾ This corresponds to the uses of total economy (S1) in ESA 2010 sector accounts classification.

Generally, the other types of ESSPROS expenditure correspond in national accounts to distributive transactions other than social benefits (second rectangle in the first row). However, in the case of administration costs, corresponding national accounts transactions can be both distributive and non-distributive (represented by the third rectangle).

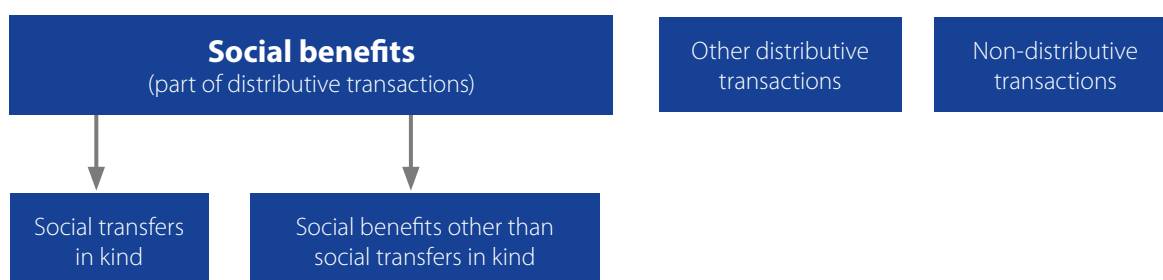
Two types of social benefits are defined in national accounts, as shown in the last two boxes at the bottom of figure 2: 1) *Social transfers in kind*, which are social benefits in kind provided by general government and non-profit institutions serving households. 2) *Social benefits other than social transfers in kind*, which consist mainly of cash benefits but also include social benefits in kind other than social transfers in kind.

Figure 2 – Main categories of expenditures in ESSPROS and related transactions in national accounts

ESSPROS



National accounts



The relationship between the categories just described are can be summarised in a conceptual bridge table, as presented in table 3.

In table 3, **X** is used for cells that are expected to contain the most typical correspondence between the two classifications, while **x** is used to indicate: *i*) other possible but less typical and/or less important correspondences; *ii*) cases where a priori there are no indications on prevalent correspondences.

As an example of case *i*), the first row says that ESSPROS cash benefits will normally be recorded in national accounts as *Social benefits other than social transfers in kind*, but there can be special cases in which they are recorded as *capital transfers*⁽²⁸⁾. ESSPROS benefits in kind can in national accounts be recorded either as social transfers in kind or as social benefits other than social transfers in kind. However, some specific cases of ESSPROS benefits in kind are recorded in national accounts as *other subsidies on products*. Examples of case *ii*) are *transfers to other schemes* and *other expenditure other than property income*.

The rows and columns for social benefits thus show that there is not a one to one correspondence between the two main categories of social benefits defined by ESSPROS (*cash* and *in kind* benefits) and by national accounts (*social transfers in kind* and *social benefits other than social transfers in kind*). In national accounts, only *non-market* resident producers can provide social transfers in kind, so that other benefits in kind are recorded in the item *social benefits other than social transfers in kind*. In addition, expenditures that in ESSPROS are *not* recorded as social benefits may be so recorded in national accounts. This concerns in particular ESSPROS category *administration costs* (vs. national accounts social transfers in kind – see row for administration costs in table 3 and point a) below). Rerouted social contributions may be included or

⁽²⁸⁾ See ESSPROS *Compendium of methodological clarifications – December 2017*, chapter 6. <http://ec.europa.eu/eurostat/documents/3859598/8500900/KS-GQ-17-013-EN-N.pdf/45e84139-50f1-4925-b1b7-f0326e06d77>

not in the value of national accounts benefits in cash recorded in *social benefits other than social transfers in kind*.

Table 3 – Bridge table between ESSPROS expenditure of social protection schemes and national accounts transactions

Expenditure										
National accounts ESSPROS	Social benefits		Other distributive transactions					Other transactions	Not recorded	Total ESSPROS
	Social transfers in kind (STK)	Social benefits other than STK	Subsidies	Property income	Current taxes on income, wealth, etc	Other current transfers	Capital transfers			
	(D63)	(D62)	(D3)	(D4)	(D5)	(D7)	(D9)			
1 Social protection benefits										
cash benefits		X					X			
benefits in kind	X	x	x							
2 Administration costs	x							x		
3 Transfers to other schemes										
rerouted social contributions		x					x		x	
other transfers to other schemes							x	x		x
4 Other expenditure										
property income				X						
other expenditure other than property income					x	x	x			
Out of ESSPROS scope, of which:										
Education and other social benefits not in social protection	x	x								
Investment income payable on pension entitlements				x						
Total National Accounts										

Classifications of social benefits in ESSPROS and in national accounts are presented in more detail in section 4.2. The remainder of this section describes the correspondences for the other types of expenditure by social protection schemes that are recorded in ESSPROS, as illustrated in rows 2, 3 and 4 of table 3.

a) Administration costs

For *administration costs*, row 2 in table 3 shows that they may correspond with social transfers in kind (when the scheme is administered by a non-market unit) or with *other (non-distributive) transactions*, when the scheme is administered by a market unit.

The ESSPROS Manual defines administration costs as “the costs charged to the scheme for management and administration thereof”. They are thus considered from the point of view of the social protection scheme and “include outgoings on registration of beneficiaries, collection of contributions, administration of benefits, inspection, reinsurance, financial management and general overheads” (see §102 and §102A of part I).

Two types of units administering a scheme are distinguished:

- Commercial insurer: administration costs are valued by the *actual fee* charged (plus any other management costs incurred by the scheme, such as attendance fees for the board of governors).
- Government units or non-profit institutions: administration costs are valued at the *sum of costs* incurred in administering the scheme (that is: intermediate consumption, compensation of employees, consumption of fixed capital and other taxes less other subsidies on production).

In national accounts *administration services* for running a *social insurance scheme* are defined as a type of output, which can be produced by a market unit (such as a private insurance corporation) or by a non-market unit (such as a social security fund). Valuation of this output is made at the fee charged by the insurance corporation or at the sum of cost for non-market units⁽²⁹⁾. Fees, or “social insurance service charges” in the specific national accounts terminology, are considered as final consumption expenditure by ESA 2010; the costs incurred in the scheme administration by non-market units (government and NPISHs) are recorded as final consumption expenditure of these units.

As a result, in table 3, for administration costs the bridge table shows intersections with *social transfers in kind* and with *other (non-distributive) transactions*. For cases, such as social assistance interventions, where a social insurance scheme is not identified in national accounts, running administrative costs will be also incorporated in social transfers in kind⁽³⁰⁾.

b) Rerouted social contributions

Rerouted social contributions represent a specific issue that involves accounting of cash benefits and possibly statistical unit effects. Rerouted social contributions in ESSPROS are *contributions paid by a scheme to another for the benefit of the beneficiary*, usually under a different function⁽³¹⁾. For example, an unemployment scheme pays unemployment benefits to the unemployed, but also contributes *directly* to an old age scheme for their future old age benefits. These contributions are therefore similar to employers’ social contributions, with the difference that they are paid by a social protection scheme and not by an employer. In ESSPROS these contributions are recorded in a separate category of expenditure included in transfers between schemes, and not in social benefits.

In national accounts practice more than one treatment is possible. First, these contributions are recorded both in gross benefits paid to households, and in social contributions paid by households⁽³²⁾. Inclusion in the value of benefits paid by the social protection scheme is represented in the second column of table 3, while the social contributions aspect is considered in section 5 of this working paper, on receipts of social protection schemes. Another possibility is that these flows are recorded as *Other current transfers* (within general government). However, if the schemes are part of the same institutional unit or belong to the same sub-sector of general government, these flows are not recorded or consolidated respectively in national accounts (column *not recorded* in table 3).

Comparing social benefits data between ESSPROS and national accounts thus requires the knowledge of the treatment adopted in national accounts. If re-routed social contributions are or are not included in the value of national accounts benefits, they have to be considered or not in ESSPROS benefits in order to have comparable concepts.

c) Other transfers to other schemes

Other transfers to other schemes may be recorded in national accounts either as *other current transfers* or as *capital transfers*⁽³³⁾. Transfers paid by social protection schemes to other schemes normally consist of capital transfers made by one scheme to reduce the deficit of another and are usually not identifiable separately in the national accounts data. Transfers between schemes of the same institutional unit or between schemes belonging to the same sub-sector of general government are not recorded or consolidated respectively in national accounts.

For these cases, ESSPROS provides specific information on social protection expenditure that cannot be identified in the national accounts. On a national level, transfers to and from other schemes are held to balance out, as for each item of expenditure classified as a transfer between schemes there should be a corresponding receipt in the same category and of the same amount.

⁽²⁹⁾ See ESA 2010 §3.74 (d), which specifies that when an employer operates his own social insurance scheme, the value of the output is determined as the sum of costs. The value of output is measured in the same way where the employer establishes a separate pension fund to manage the scheme.

⁽³⁰⁾ Notice that such social transfer in kind may correspond to the ESSPROS administration costs of any benefit, in cash or in kind.

⁽³¹⁾ For details see ESSPROS Compendium of methodological clarifications – Dec. 2017, chapter 8. <http://ec.europa.eu/eurostat/documents/3859598/8500900/KS-GQ-17-013-EN-N.pdf/45e84139-50f1-4925-b1b7-ff0326e06d77>

⁽³²⁾ This is the same treatment as the re-routing of employers’ social contributions in national accounts. See section 5 of this working paper on re-routing of employers’ social contributions.

⁽³³⁾ For capital transfers, more detail can be found in ESSPROS Compendium of methodological clarifications – Dec. 2017, chapter 6. <http://ec.europa.eu/eurostat/documents/3859598/8500900/KS-GQ-17-013-EN-N.pdf/45e84139-50f1-4925-b1b7-ff0326e06d77>.

d) Other expenditure

In ESSPROS, this category is broken down into property income and a residual category that includes other miscellaneous payments by social protection schemes, such as taxes on income and wealth. Property income is a type of distributive transaction defined in national accounts, while the other miscellaneous payments correspond to taxes or to other transfers, current or capital. As in the case of other transfers, *other expenditure* items are usually not identifiable separately in the national accounts data.

4.2. Links between classifications for social benefits

Social benefits as defined in ESSPROS and in national accounts are further broken down according to the respective classifications.

The most important of ESSPROS classifications is the functional classification, which defines eight functions of interventions in social protection: *sickness/health care, disability, old age, survivors, family/children, unemployment, housing, social exclusion n.e.c.* A breakdown of benefits by function is typically the piece of information most requested by users such as social protection analysts and policy makers. Within each social protection function, ESSPROS further provides various detailed data by types of benefits in order to suit more specialised users' needs.

In national accounts, the classifications available for social benefits data are an articulation of the various classifications used for transactions generally. In the ESA 2010 framework, three sets of data can be considered: a) Sector accounts. b) Government finance statistics (GFS), in particular the breakdown of social benefits according to the COFOG functional classification. c) Final consumption expenditure of non-profit institutions serving households (NPISHs), for the breakdown according to product available from the use table (only for benefits in kind).

a) Sector accounts

Sector accounts cover the whole economy and provide a complete reference framework for total social benefits and contributions recorded in national accounts. Total benefits and contributions include those that are out of the scope of social protection statistics, in particular those related to education. From sector accounts, however, a breakdown by function is not available. Sector accounts group institutional units, according to their economic characteristics, in five resident sectors (households, general government, non-financial corporations, financial corporations and non-profit institutions serving households) and the rest of the world.

From sector accounts, users can derive a breakdown of expenditure on social benefits and contributions by general government and by the private sector. Social transfers in kind (D.63) are predominantly government expenditure but they are also provided in the private sector by non-profit institutions serving households. Social benefits other than social transfers in kind (D.62) are recorded as expenditure for any sector, including households in their capacity of unincorporated enterprises. However, the government sector is normally the main provider of these benefits too. More detailed data on the areas of intervention targeted by such government spending are available from GFS.

b) Government Finance Statistics data for government expenditure by function

The Classification of the Functions of Government (COFOG)⁽³⁴⁾ is structured in ten divisions, of which two are relevant in relation with ESSPROS: division 7 (*Health*) and division 10 (*Social protection*). There are in particular strong links between the definition of COFOG division 10 *Social protection* and ESSPROS,

⁽³⁴⁾ The full methodology related to this area of statistics is presented and explained in Eurostat's *Manual on sources and methods for the compilation of COFOG statistics*, 2019 edition (<https://ec.europa.eu/eurostat/web/products-manuals-and-guidelines/-/ks-gq-19-010>).

although it is important to notice that the social protection division in COFOG excludes health expenditure, which is included in ESSPROS social protection scope within the function sickness/health⁽²⁵⁾.

Further to the mentioned difference in the position of health care expenditure, another relevant aspect is that group 10.1 of COFOG covers both sickness *and* disability, which are two different functions in ESSPROS. In COFOG, the distinction between sickness and disability appears at the lower level of COFOG classes (class 10.1.1 for sickness and 10.1.2 for disability), but COFOG data at class level are generally not available. The remaining 6 groups of COFOG division 10 correspond to ESSPROS functions, as follows: 10.2 - Old age; 10.3 - Survivors; 10.4 - Family and children; 10.5 - Unemployment; 10.6 - Housing; 10.7 - Social exclusion n.e.c. By contrast, regarding sickness, health and disability, a connection between COFOG groups and ESSPROS functions is possible only for the aggregate of the three headings. Table 4 summarises the correspondences between ESSPROS and COFOG functions.

Table 4 – Bridge table by function ESSPROS/COFOG

Functions of government COFOG	Cofog 7.1-7.4 + Cofog 10.1		Cofog 10.2	Cofog 10.3	Cofog 10.4	Cofog 10.5	Cofog 10.6	Cofog 10.7
	Health, sickness and disability		Old age	Survivors	Family and children	Unemployment	Housing	Social exclusion n.e.c.
1. Sickness/Health care								
2. Disability								
3. Old age								
4. Survivors								
5. Family/children								
6. Unemployment								
7. Housing								
8. Social exclusion nec								

Data on government expenditure according to COFOG are available for both social transfers in kind (D.63) and for social benefits other than social transfers in kind (D.62). Social transfers in kind can also be split between non-market production (D.631) and purchased market production (D.632). As COFOG covers only the government sector, it is to be expected that benefits recorded in ESSPROS are not lower than those recorded in COFOG. However, conversely, administration costs of social protection schemes are treated in ESSPROS as a separate category of expenditure but in COFOG they are included in the value of social transfers in kind. This may have a significant impact in some countries, in particular for certain functions. COFOG explanatory notes indeed include “administration of social protection schemes” in the description of the various groups of divisions 7 and 10.

c) National accounts data on social benefits provided by NPISHs

Sector accounts provide data for total social benefits by NPISHs, broken between social transfers in kind and social benefits other than social transfers in kind. However, sector accounts do not distinguish social benefits according to function and cover any kind of benefit including those in education and others that may be outside the social protection scope.

For *social transfers in kind* provided by NPISHs, more detailed data can be found from another source, namely *final consumption expenditure* of NPISHs as reported in the *use table* of the ESA 2010 data transmission programme. The use table gives a breakdown by 64 products of final consumption expenditure of NPISHs, of which *human health services* (CPA86), *residential care services and social work services without accommodation* (CPA87-88) fall within the ESSPROS scope⁽²⁶⁾.

⁽²⁵⁾ The explanatory notes of COFOG division 10 (p. 225 of COFOG Manual) inform that the social protection functions and their definitions are based on the 1996 European System of integrated Social Protection Statistics (ESSPROS) of the Statistical Office of the European Communities (Eurostat).

⁽²⁶⁾ See CPA 2008 - CPA - Eurostat (europa.eu).

5

ESSPROS receipts and correspondences with national accounts flows

In ESSPROS, receipts of social protection schemes are classified in the four categories shown in figure 3 below. Figure 3 also gives an overview of the corresponding national accounts transactions. There is strong consistency between ESSPROS and national accounts in definitions of *social contributions* and in their breakdown into sub-categories.

According to ESA 2010 (§4.09 and §4.88), social contributions are payments (actual or imputed) to social insurance schemes made in order to *secure entitlement to social insurance benefits*, in the current or subsequent periods, for the employees or other contributors, their dependants or survivors. The ESSPROS Manual further specifies that the payment of social contributions by or for a protected person fulfilling the conditions required by a scheme creates a *personal* entitlement to social benefits⁽³⁷⁾.

The main categories of social contributions are similarly defined, with both systems identifying the category *employers' social contributions*. Employers' contributions are also broken down in *actual* and *imputed* contributions, in ESSPROS and in national accounts. The remaining part of social contributions are classified in ESSPROS as *protected persons' contributions* and generally correspond with national accounts *households' contributions*. However, national accounts have an additional category that does not exist in ESSPROS (*households' contributions supplements*) and there are some other differences that are analysed more in depth below.

For receipts of social protection schemes the main reference in the various national accounts data sets are the sector accounts, where the relevant national accounts items, in particular social contributions, are recorded as part of the *resources of resident units and sectors*⁽³⁸⁾.

The other three categories of receipts defined in ESSPROS are recorded in national accounts under distributive transactions, mainly in current and capital transfers and in property income. They are in general recorded in items including other miscellaneous components so that the part of transfers or property income related to social protection cannot generally be identified in the national accounts data.

Figure 3 – Main categories of receipts in ESSPROS and related transactions in national accounts

ESSPROS



⁽³⁷⁾ In particular, granting a personal entitlement distinguishes social contributions from ESSPROS earmarked taxes which are taxes that, by law, can be used only to finance social protection. Differently from social contributions, earmarked taxes do not secure a personal entitlement to social benefits.

⁽³⁸⁾ This corresponds to the resources of total economy (sector S.1) in ESA 2010 sector accounts.

National accounts

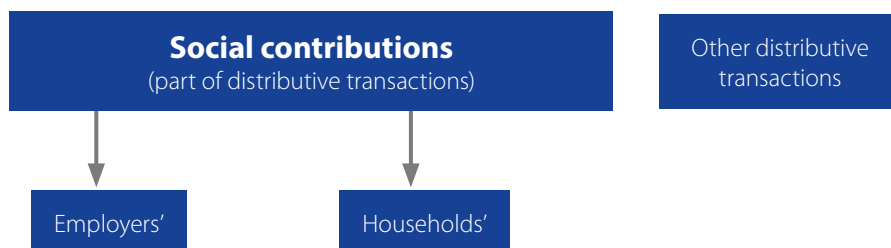


Table 5 provides a conceptual bridge table showing the correspondences between the receipts transactions in ESSPROS and in national accounts, with ESSPROS categories presented in rows and national accounts transactions presented in columns.

The four categories of ESSPROS receipts are analysed more in depth in the rest of this section.

Table 5 – Bridge table between ESSPROS receipts of social protection schemes and national accounts transactions

National accounts		Social contributions				Other distributive transactions					Not recorded	Total ESSPROS
		Em- ployers' actual social contri- butions D121 and D611	Em- ployers' imputed social contri- butions D122 and D612	House- holds' actual social contri- butions D613	House- holds' social contri- butions supple- ments D614	Taxes on produc- tion D29	Taxes on income D5	Property income D4	Other current transfers D7	Capital transfers D9		
ESSPROS	1 Social contributions											
	Employers											
	actual	X				x				x		
	imputed		X									
	Protected persons			X			x			x		
	employees											
	self-employed											
	pensioners and others											
	2 General government contributions											
	earmarked taxes								x	x	x	
	general revenue								x	x	x	
	3 Transfers from other schemes											
	rerouted social contributions			x					x		x	
other transfers from other schemes								x	x	x		
4 Other receipts												
property income				x			x					
other								x	x	x		
Out of scope												
costs for employers of operating social insurance schemes		x										
specific reductions on employers' contributions	x											
Total National Accounts												

5.1. Social contributions

The upper part of table 5 shows that the definitions of social contributions used in the two systems largely overlap, so that the main correspondences fall on a diagonal in the block connecting social contributions. In ESSPROS, there is a further breakdown (employees, self-employed, pensioners and others) of social contributions by protected persons as compared to national accounts, in which households' actual social contributions are not similarly broken down according to the type of households. On the other hand, ESA 2010 contains an additional category of social contributions, households' contributions supplements, which in ESSPROS are recorded as property income.

In some cases, however, what is recorded as social contributions in ESSPROS could be recorded as taxes or as capital transfers in national accounts, which is represented in the upper-right block of table 5. For example, by convention, all periodic payments by or for protected persons into compulsory universal social protection schemes are classified by ESSPROS as social contributions (rather than as taxes), if levied as a function of income, payroll, or the number of employees⁽³⁹⁾. ESA 2010 does not provide for such a convention, which can be a source of difference in certain countries according to the rules regulating the collection of social contributions.

Some specificities and technicalities of accounting presentations and valuation principles for social contributions should also be taken into account for comparing data recorded in ESSPROS and in national accounts. In particular this concerns: a) re-routing of employers' social contributions in national accounts; b) valuation of imputed employers' social contributions; c) households' social contribution supplements; d) treatment of specific deductions from compulsory employers' actual social contributions.

a) Re-routing of employers' social contributions in national accounts

Employers' social contributions are a special case in national accounts, with the same concept defining two different flows of equal value:

- Flows D.121 + D.122 (see ESA 2010 §§4.08-4.11) are employers' social contributions as a component of *compensation of employees*, and are recorded as payable by employers to households.
- Flows D.611 + D.612 (see ESA 2010 §§4.92-4.99) are employers' social contributions recorded as payable by households to social insurance schemes.

This is related to what is described in national accounts as the *re-routing* of employers' social contributions⁽⁴⁰⁾. Although the actual flow consists of a single payment from an employer to a social insurance scheme, in order to bring out the economic substance of the operation (namely, that employers' social contributions are paid for the benefit of employees) national accounts record the two transactions defined above.

In ESSPROS, there is no similar issue of rerouting of transactions and employers' social contributions are recorded as receivable by social protection schemes from employers. It will be remembered that the ESSPROS category *re-routed social contributions* refers to another type of receipt (see point 4.1 b) above and 5.3 below).

b) Valuation of imputed employers' social contributions

Some social benefits may be provided directly by employers to their employees, former employees or other eligible persons, without involving an autonomous insurer or pension fund and without maintaining segregated reserves in their balance sheet⁽⁴¹⁾. Actual payments of social contributions are not recorded, in full or in part. This regards mainly, though not exclusively, benefits for government employees, and may apply to pension benefits and to other benefits such as paid sick leave, maternity leave, and health services.

⁽³⁹⁾ See §79B of the ESSPROS Manual, part I. For more detail on capital transfers, see chapter 6 of the ESSPROS Compendium of methodological clarifications – edition 2021.

⁽⁴⁰⁾ See ESA 2010 §1.74.

⁽⁴¹⁾ See definitions in ESSPROS Manual, part I, §73 and ESA 2010 §4.10. Also ESA 2010 §4.07 (b), already quoted above, is relevant for imputed social contributions.

Both in ESA and in ESSPROS a counterpart receipt of a scheme is recorded, as employers' *imputed* social contributions, for the current and future expenditure in directly provided social benefits. The two systems concur on the principle requiring imputed contributions to be estimated based on actuarial calculations of the net current value of the promised future benefits⁽⁴²⁾.

Given the practical difficulties involved in estimations of imputed contributions based on actuarial calculations, ESA 2010 allows two simplified methods when the actuarial calculations cannot obtain a sufficient level of reliability: (1) based on a reasonable percentage of wages and salaries of current employees; (2) as current benefits minus current actual contributions paid. The ESSPROS Manual mentions the second method only, under §74A, and only for the case of *mature* schemes. Therefore, for imputed employers' contributions, differences in data may originate from differences in the estimation methods used.

c) Households' social contribution supplements

As mentioned above, the ESA 2010 has introduced the category of households' social contribution supplements⁽⁴³⁾. Similarly to the case of employers' social contributions, which are recorded first as part of households' compensation of employees and then as receivable of social insurance schemes, national accounts have defined a notional circuit for the investment income earned in the administration of the technical reserves of a social insurance scheme. In practice, this income is retained by the fund's administrator, but is treated in national accounts as first distributed to households in the allocation of primary income account (flow D.442, investment income payable on pension entitlements) and then in the secondary distribution of income account as being paid back by households in the form of social contribution supplements (D.614).

Households' social contribution supplements are not recorded as a specific item in ESSPROS. The actual receipts of investment income that in national accounts are recorded as described above are generally recorded in ESSPROS as receipts of property income by the scheme (see table 5).

d) Treatment of specific rebates or deductions from compulsory employers' actual social contributions

Rebates on social contributions may be used as an instrument of economic policy interventions. In national accounts, if rebates on social contributions meet specific conditions⁽⁴⁴⁾, the value without rebate is recorded as employers' social contributions and is balanced by a subsidy on production to the employers equal to the value of the rebate or reduction.

In ESSPROS, the actual receipt value (net of any reduction) of employers' contributions is recorded. Therefore national accounts may record a higher value for employers' social contributions in these cases.

5.2. General government contributions

ESSPROS definition of general government contributions includes two parts (see ESSPROS Manual, part I §77):

"i) the cost to general government of running government-controlled non-contributory schemes".

⁽⁴²⁾ See ESSPROS Manual §74 and ESA 2010 §4.10. ESA 2010 has introduced an additional element, compared to ESA 1995, providing that, if the employer operates the scheme himself, the costs of operating the scheme are treated as employers' imputed contributions. In this respect, the ESSPROS manual still makes reference to ESA 1995 where these costs were not recognised as part of employers' imputed contributions.

⁽⁴³⁾ See ESA 2010 §§4.101, 17.31 and 17.91-93.

⁽⁴⁴⁾ In particular, rebates should be specific to certain groups of employees, such as young or elderly persons, employees of disadvantaged regions or in selected industries, handicapped persons, etc.; and the employees does not have reduced entitlements to social security compared with employees not having right to the rebate.

This category of receipts can be considered as an accounting counterpart of government expenditure (in particular, of social benefits and administration costs expenditures) in government-controlled non-contributory schemes, such as schemes operating in social assistance.

“ii) financial support provided by general government to other resident social protection schemes”.

This second category includes actual transfers from government that are received by any other type of scheme except government-controlled non-contributory schemes, excluding those made on account of a government social protection scheme which are classified under transfers from other schemes⁽⁴⁵⁾. Actual and imputed contributions made by government to secure benefits to its employees, former employees and their dependants are not included here but under employers' social contributions.

In national accounts, for case (i) no receipt is recorded (see column “not recorded” in table 5)⁽⁴⁶⁾. For case (ii), a receipt is recorded among current or capital transfers in national accounts if the unit receiving the transfer does not belong to the government sector or to the same sub-sector of general government; otherwise transfers internal to the same sub-sector of government are consolidated so that no transaction is recorded. In addition, transfers between sub-sectors of general government are recorded only in the accounts of the subsectors and not in the consolidated accounts of the general government sector as a whole (see ESA 2010 §4.120 and 4.165-c).

General government contributions received by social protection schemes are therefore usually not identifiable separately in the national accounts data while ESSPROS provide detailed data at scheme level.

5.3. Transfers from other schemes

Transfers from other schemes include the two sub-categories: *rerouted social contributions* and *other transfers from other schemes*. The recording of these transactions in ESSPROS receipts is symmetric to their recording as expenditures (see rerouted social contributions and other transfers to other schemes in the part on expenditure).

As described in point 4.2 b), there may be two different approaches to the recording of rerouted social contributions in national accounts practice. The first one is that these contributions are recorded both in the value of gross benefits paid to households, and in social contributions paid by households. The correspondence with social contributions for this case is represented in the column households' actual social contributions of table 5. A second approach observed is that they are recorded as *other current transfers* (between general government). However, if the schemes are part of the same institutional unit or belong to the same sub-sector of general government, these flows are not recorded in national accounts (column “not recorded” in table 5).

5.4. Other receipts

This category is broken down into *property income* and a residual category of other miscellaneous receipts of social protection schemes, such as proceeds from collections, net proceeds from private lotteries, claims on insurance companies and large gifts such as legacy from the private sector. Property income is a type of distributive transaction defined in national accounts, while the other miscellaneous receipts are recorded as current or capital transfers in national accounts. Property income as receipts is generally a substantial item in the accounts of funded social protection schemes that administer reserves. Taking into account §85 of part I of ESSPROS Manual, there may be a close correspondence in value between ESSPROS

⁽⁴⁵⁾ See ESSPROS Manual part I, §77C and appendix VI, 5 (ii).

⁽⁴⁶⁾ This is an implication of the different statistical units, in ESSPROS the social protection schemes and in national accounts the institutional unit.

property income receipts and national accounts households' contributions supplements (D.614). Other receipts items for social protection schemes are not identifiable separately in the national accounts data.

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Links and differences between Social Protection statistics (ESSPROS) and National Accounts

METHODOLOGICAL ASPECTS AND CONCEPTUAL BRIDGE TABLES

This working paper systematically compares the methodology of social protection statistics (ESSPROS) with the national accounts methodology. Consistency between social protection and macroeconomic indicators is very important for users in various contexts, including policy making and monitoring. Comparability of aggregates requires taking into account the impact of differences in definitions, coverage and accounting approaches. For social protection statistics, this concerns mainly *social benefits* and *social contributions*, for which national accounts provide data according to their own general definitions and classifications and ESSPROS statistics give detailed breakdowns on various additional characteristics. In ESSPROS, social protection expenditure covers interventions providing social benefits associated with *sickness and healthcare, disability, old age, survivors, family/children, unemployment, housing and social exclusion not elsewhere classified*. Social protection benefits include pensions and other benefits. In this working paper, correspondences between the respective definitions and classifications are established and presented together with the explanation of the main reasons for deviations. 'Bridge tables' are used to guide readers into social protection classifications and terminology, compare them with those used in national accounts and analyse in more detail links and differences for the most important social protection transactions, such as social benefits and contributions.

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