## **Working Paper:**



# The Danish ESSPROS Statistics for 2012

#### Preben Etwil

# Statistics on expenditure on and financing of social protection benefits

The Danish statistics on *expenditure on social protection benefits* are currently based solely on recommendations by ESSPROS (European System of integrated Social **PRO**tection Statistics). The purpose of these social expenditure statistics is to enable analysis of the development in social expenditure for use by, among others, the EU's statistical office (Eurostat) and the Nordic Council's Social Statistical Committee (NOSOSKO).

The objectives of the ESSPROS are to provide a coherent description of social expenditure in a broad sense in the different EU member states. It should be emphasised that not all of the social spending listed in these statistics is financed by public funds. The key criterion is that schemes are collective and obligatory, e.g. compulsory pension schemes are included in the statistics whereas private pension schemes are not. Various forms of compulsory employer-funded expenditure on health insurance, etc. are also included.

The currently applicable ESSPROS manual is available at: http://epp.eurostat.ec.europa.eu/cache/ITY\_OFFPUB/KS-RA-11-014/EN/KS-RA-11-014-EN.PDF

This document presents the history of the Danish statistics and provides a relatively detailed review of the many recommendations in the ESSPROS manual. It concludes with a thorough review of the Danish reorganisation of the statistics, which was carried out in 2012.

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#### History

The social expenditure statistics were originally established as far back as the 1940s for the benefit of ministers for social affairs in the Nordic region who expressed a need to analyse the development in both social expenditure and the number of recipients of social benefits. This led to cooperation on comparable Nordic social statistics. The result of this cooperation is the annual publication of comparable Nordic statistics in *Social Security in the Nordic Countries*. Since 1972, the statistics have, to a large extent, been drawn up in a format that is able to meet the EU's need for comparable social statistics. As both the member states and social policy are developing on a continual basis, it was necessary to make changes to the ESSPROS manuals in 1981, 1996, 2008 and, most recently, in 2011. The latter change incorporated the new requirement for member states to calculate net social expenditure.

#### Social benefits and provisions

The term provisions (social benefits) should be understood in a relatively broad sense. It covers cash payments, reimbursement of expenditure and provision of goods and services. Whether benefits are provided by public or private bodies is of no importance. For practical reasons, certain informal and incidental types of support, which do not require regular accounting (such as Christmas collections, ad hoc humanitarian aid and emergency relief), are not included in this definition of provisions.

Social protection in a broad sense covers all types of public or private intervention within a range of functions such as sickness, disability, rehabilitation, old age, survivors, unemployment, employment and housing. Thus, in a Danish context, the European social statistics also cover healthcare policy, elements of employment policy and housing policy. On the other hand, education is not covered unless it is an element of the support given to needy families with children.

#### The statistics:

- cover all social benefits, in a broad sense, and their financing;
- are geared to international comparability;
- are harmonised with other statistics particularly the main concepts of the National Accounts.

According to the ESSPROS manual, social benefits include all public and private measures that relieve households and individuals of the financial burden of a defined set of socially related risks or needs, provided that there is neither a simultaneous reciprocal nor an individual arrangement involved.

Social benefits are made through collectively organised schemes by government and/or collective agreements. All schemes that are solely based on individual arrangements, or for which simultaneous reciprocal agreements exist, are *not* regarded as social protection in this context.

In order to be included in these statistics, it is important that there is no obligatory reciprocal arrangement associated with the measure, e.g. an interest-bearing loan, intended to offset a social problem, is not considered social protection as the beneficiary is required to return the consideration. However, where the reciprocal arrangement is not *simultaneous*, the expenditure is classified as social protection.

In practice, a scheme is classified as social protection when by law or by another public regulation certain groups of the population are obliged to participate in a specific insurance scheme, or when employees and their dependants are insured as a direct consequence of collective wage agreements.

#### Classification by function

Social expenditure in the Danish version of ESSPROS is classified by functions:

#### **Function**

#### **Brief description**

1. Sickness/Health care

Benefits in cash or in kind, intended to maintain a person's loss of income in connection with illness and to restore or improve the health of people affected by illness, regardless of the origin of the disorder. In Denmark, this function covers public health insurance, including school and children's dental care and domiciliary care; benefits during illness paid by local government; employers' expenditure on sickness benefit during the employer's period; hospitals and healthcare services; and preventive healthcare, including examinations during pregnancy and medical examinations of children.

2. Disability and rehabilitation

Benefits in cash and in kind in connection with a physical or mental handicap. In Denmark, this function covers, among other things, early retirement benefit, highest and intermediate rates of early retirement benefit, occupational injury insurance, rehabilitation, care for persons with disabilities, help for families with disabled children or adults, institutions, home help for disabled persons and financial support for disability aids.

3. Old age

Benefits in cash and in kind in connection with old age. In Denmark, this function includes, among other things, old age pension, semi-retirement pension, labour market supplementary pension, civil service pension, pension funds, life insurance companies, early retirement pension, nursing homes and nursing and care services, including home help and financial support for aids for the elderly.

4. Survivors

Benefits in cash and in kind in connection with the death of a family member. In Denmark, this function includes, among other things, help with funeral expenses.

5. Family/Children

Benefits in cash and in kind associated with families with children. In Denmark, this function covers, among other things, maternity pay, family allowance, child benefit, daycare and 24-hour care for children and adolescents and measures to avoid placement of children outside the home.

6. Unemployment and employment

Benefits in cash and in kind in connection with unemployment. In Denmark, this function covers, among other things, unemployment benefit, recipients of cash welfare benefits in activation programmes, reimbursement for loss of income during education/retraining provided by the state, measures promoting employment and job centres.

7. Housing

Help towards the cost of housing. In Denmark, this function includes rent subsidies and housing

benefit.

8. Social exclusion nec.

Benefits in cash or in kind specifically intended to combat social exclusion where the affected persons are not covered by one of the other functions. In Denmark, this function includes, among other things, cash benefits according to the Danish Social Assistance Act, including help for refugees, a variety of integration activities, the Employees' Guarantee Fund, care homes and treatment of alcohol and drug abuse.

#### **Social schemes**

In accordance with the EU scheme, Denmark is obliged to describe, compile and classify the various different social schemes in blocks for use in evaluating the quality of the statistics and to compare the differences between the European countries. The reason for these social schemes is:

- to acquire a more in-depth knowledge of social protection schemes
- to acquire better qualitative information so that it is easier to evaluate the correlation of the schemes to the selected classifications
- to acquire a clearer basis for footnotes in the EU's publications and in their databank, Cronos
- to provide users of the statistics with a good response to the content of the schemes
- to provide the producers of the statistics with support during their validation process

In this connection, Denmark is obliged to complete and submit the table below:

- 1.1 General information includes:
  - Period covered
  - 2. Date of updating qualitative information
  - 3. Responsible organisation, person and e-mail contact
- 1.2 Greneral description of the social scheme includes:
  - 1. Name of the scheme in English and Danish
  - 2. Historical development of the scheme (year in which the scheme was introduced/abolished/merged/split)
  - 3. Classification of the scheme
  - 4. Reference legislation, regulation or schemes
  - 5. Organisation(s) responsible for the scheme
  - 6. Financing of the social scheme
  - 7. Description of the people covered by the scheme
  - 8. Bibliography and web bibliography (optional)
  - 9. History of the scheme
  - 10. Notes and other relevant information

This table must be filled out in English and is only available to the public from the EU databank, Cronos.

The correlation between the Danish social schemes and ESSPROS expenditure functions can be seen in Appendix 3.

#### Categories of expenditure

The key point of the ESSPROS core system is to break down **expenditure on social benefits** into a number of sub-categories. For example, the system distinguishes between expenditure on social measures and administration costs. There is also a sharp distinction between cash benefits and benefits in kind. However, the most

important breakdown is the breakdown by function, enabling us to determine whether expenditure refers to old people, families, the unemployed or another social group.

The ESSPROS distinguishes between four main categories of expenditure, and social benefits constitute the core of the system.

- 1. Social benefits (social provisions)
- 2. Administration costs
- 3. Transfers from other schemes
  - 31 Social contributions re-routed from other schemes
  - 32 Other transfers from other schemes
- 4. Other expenditure
  - 41 Property
  - 42 Other

In Denmark, only the first two categories are applied.

#### **Transaction principles**

The transaction value must be calculated based on the amount for which the benefit can be exchanged for cash. If this is not possible, the benefit must be valued at its production cost. The cost principle is particularly relevant to benefits in kind. However, the price should be similar to prices achievable on the market. If the manufacturer is a market producer, benefits in kind are valued at the current market price. If the manufacturer is a non-market producer, the costs should cover the purchase of goods and services, direct and indirect expenditure on wages and salaries, write-offs and taxes on production, etc. (corresponding to the statistics on public expenditure from public funds). Interest expenses are not included. This means, for example, that the salaries of doctors and nurses at a hospital are included in expenditure on benefits in kind, whereas the salaries of staff in the Ministry of Health are excluded as they primarily produce collective rather than individual services.

Social benefits in the form of interest-free or low-interest loans must - in principle - be valued at the amount which constitutes the difference between the agreed rate of interest and the current market rate. This rule is not applied in Denmark in practice.

The ESSPROS core system records gross social benefits, i.e. without any deduction of taxes and other levies payable on the benefits in question.

It is important to distinguish between private and public administration costs. If the social scheme is run by a commercial insurer, such as a life insurance company, administration costs are valued at the actual fees charged by the insurer. If, on the other hand, the scheme is managed by government authorities or non-profit institutions, administration costs are valued at the sum of the costs incurred in administering the scheme, i.e. direct and indirect remuneration of employees, write-offs and production taxes etc. (government expenditure). The limit may be discretionary.

Payment and defrayment of expenses in foreign currency are converted at the average exchange rate for Danish currency - transaction costs are not included.

In principle, all transactions in the ESSPROS are recorded on an accrual basis, which is identical to the way in which public finances are recorded.

The ESSPROS applies gross recording as the general recognition principle, although in certain cases a netting of income and expenditure is necessary, e.g. in order to

offset incorrect benefits. Similarly, consolidation of the various social schemes is not recommended.

The ESSPROS recommends the same principal system as is used for government finances, i.e. the institutional unit which is dealing directly with households must be considered responsible for the scheme. This means that government transactions, which are for example paid out by Local government, are attributed to a balance between members of the public and the Local government sector.

#### Means-tested expenditure - or not?

The ESSPROS statistics distinguish between means-tested and non means-tested benefits. In the ESSPROS, means-tested social benefits are social protection benefits which are explicitly or implicitly conditional on the beneficiary's income and/or wealth falling below a specified level. It can thus be concluded that non means-tested benefits are given regardless of the beneficiary's income or financial circumstances.

In practice, this sometimes causes problems with the statistics as, according to the wording of the Act, part of a benefit (e.g. the basic state pension) may be non meanstested and other parts (e.g. additional pension allowance) may be determined by the income of the beneficiary. However, it is not always possible to trace this breakdown in the financial information available in the statistics. In such cases, Statistics Denmark has chosen *not* to make an estimated breakdown as we know from experience that a specific breakdown can quickly become outdated. We have instead chosen to allocate the whole benefit to a category which agrees with its predominant characteristic; in the case of the state pension, this is non means-tested.

The codes applied to the Danish statistics are listed in Appendix 1.

#### **Economic categories**

In the ESSPROS statistics, economic categories are broken down into a number of sub-categories.

**Income/financing** Receipts of an economic nature are grouped as follows:

- social contributions
- general government contributions
- transfers from other schemes
- other receipts

These receipts are further broken down by sector:

- corporations
- general government contributions
- households
- non-profit institutions
- rest of the world

Receipts can be further broken down according to the classification system below:

- 1. Social contributions
  - 11 Employers' social contributions
    - 111 Actual contributions
    - 112 Imputed contributions
  - 12 Own social contributions
    - 121 Employees
    - 122 Self-employed persons
    - 123 Pensioners and others

- 2. General government
  - 21 Earmarked taxes and duties
  - 22 General revenue
- 3. Transfers from other schemes
  - 31 Social contributions re-routed from other schemes
  - 32 Other transfers from other schemes
- 4. Other receipts
  - 41 Property income
  - 42 Other

The ESSPROS takes an interest in the institutional sector from which the income, i.e. the financing, for the social protection schemes originates:

- 1. All resident institutional units
  - 11 Corporations (financial and non-financial)
  - 12 General government
    - 121 Central government
    - 122 State and local government
    - 123 Social security funds (not applicable to the Danish ESSPROS)
  - 13 Households
  - 14 Non-profit institutions serving households
- 2. Rest of the world

The classification of institutional sectors thus follows the definitions in the National Accounts fairly closely.

The original source material for receipts or financing is not quite so applicable to the ESSPROS statistics as the source material for expenditure. This is mainly due to the fact that many of the state's, local government's, region's and social funds' receipts are not specifically earmarked for a single social expenditure. Financing for expenditure is usually taken from "the common purse", i.e. General government sector taxes.

#### **Cash benefits**

In the ESSPROS, cash social benefits are defined as an amount paid out in cash which does not require documentation of actual expenditure. If, however, payment is subject to documentation of actual expenditure (a form of outlay), the payment will be considered a benefit in kind.

In order to make the ESSPROS and the Danish system of national accounts (ENS) as comparable as possible, Denmark has chosen to grant equal status to "Cash benefits" and the National Accounts' "Social income transfer to households"- with very few exceptions. The exceptions are that, in these social statistics, rent allowance, housing benefit, parental subsidies for daycare places and contributions towards funeral expenses are considered benefits in kind.

It is important to note that the government wage subsidy that is paid to enterprises as a component of the active labour market policy is *not* included in these statistics as, in order to be included in social expenditure in a broad sense, government expenditure must increase the disposable income of protected people. This is not the case as the expenditure is paid to the enterprise in the form of a subsidy. The enterprise then pays an ordinary wage for work done, which cannot be considered social expenditure.

#### Benefits in kind

In the ESSPROS, social benefits in kind are defined as benefits granted in the form of goods or services made available to protected people, either free of charge or at reduced prices. This definition is, in essence, in line with the National Accounts' concept of consumption.

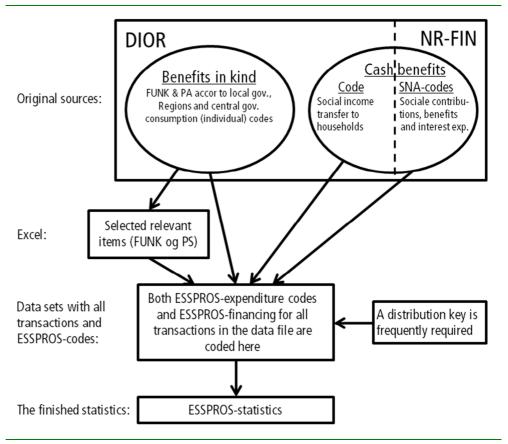
In the ESSPROS, expenditure on benefits in kind is broken down as follows:

- + Compensation of employees
- + Intermediate consumption
- + Other taxes on production and other subsidies on production, net
- + Social benefits in kind
- Sale of goods and services

Consumption in production covers, among other things, purchase of various goods and services which either are given directly to protected people or are included in the government institutional unit's production of services for citizens. Sale of goods and services covers, among other things, parents' payments to daycare institutions or nursing home residents' purchase of food and the like. Thus, the calculation of ESSPROS expenditure only includes the elements which impose costs on the government sector.

In order to be included in these social statistics at all, the benefit in kind must be individual in nature as collective elements cannot be considered social protection of an individual citizen. The ESSPROS finances thus coincide with those of the government sector in the statement of individual and collective government expenditure. One example of this distinction is that salaries of doctors and nurses at a hospital are included in the ESSPROS statistics whereas doctors employed by the Ministry of Health are excluded as they produce collective rather than individual services.

Figure 1. Coding of benefits in kind and cash benefits



#### **Administration costs**

The ESSPROS sets out to provide an exhaustive description of the social benefits. As a result, if a scheme has incomplete administrative data, it is acceptable to make necessary estimates with the aid of, e.g., an allocation base. Wherever possible, this has been avoided in the Danish statistics, except in the case of the statement of local government administration costs. This is partly due to the fact that local governments usually collect all of their administrative functions in centralised civic centre units.

#### Insurance or social benefit?

It is important to emphasise that insurance policies taken out on private initiative or in a person's own interest are not considered social provisions. For example, a private life insurance policy is not regarded as a social provision. All types of individual insurance policy are therefore excluded from the ESSPROS concept of social provisions. Similarly, collective insurance policies, such as travel insurance, cannot automatically be reckoned as social provisions. In such cases, in addition to the obligatory and collective aspects, there must be some form of social solidarity behind the insurance policy, i.e. there must be a political, social objective and insurance cover must not be calculated based on purely actuarial principles.

This principle is also applied in the National Accounts Manual (ENS 1995) in which social insurance schemes are required to meet one of the following criteria:

- 1. participation in the scheme is compulsory, either pursuant to the law or in accordance with employment terms
- 2. the scheme is managed on behalf of a group and is limited to the group of insured members
- 3. employers pay any contributions to the scheme on behalf of the employees

As a consequence of the concurrence of the ESSPROS and ENS 95 manuals, Denmark has decided to use the National Accounts as the source material for the calculation of income and expenditure of these schemes.

D.44: Property income attributed to insurance policy holders

D.6111: Employers' actual contributions to social schemes

D.6112: Employees' contributions to social schemes

D.6113: Contributions to social schemes by self- and non-employed persons

D.62: Social benefits other than social transfers in kind (i.e. the actual pension payments to the insured).

#### **Social protection schemes**

In addition to the above, the following restrictions apply to the ESSPROS:

**Schemes** which are grouped according to the characteristics below:

- government-controlled as opposed to non government-controlled.
- compulsory as opposed to non-compulsory
- contributory as opposed to non-contributory
- universal as opposed to specific
- basic as opposed to supplementary

#### Breakdown by insurance scheme

It is possible to classify the various social insurance schemes in the extended ESSPROS system.

#### Criteria Categories of social protection schemes 1. Decision-makers 11 Government-controlled 111 Central government 112 State and local government 113 Social security funds 12 Not government-controlled 121 Schemes for employees 1211 Contractual schemes 1212 Non contractual schemes 122 Other non government-controlled schemes 2. Legal enforcement 21 Compulsory schemes Non-compulsory schemes 22 221 Schemes available by law 222 Other non-compulsory schemes 3. Establishment of 31 Contributory schemes entitlements 32 Non-contributory schemes 4. Scope 41 Universal schemes 42 General schemes 43 Special schemes 431 Schemes for public servants 432 Schemes for the selfemployed 433 Other occupational schemes 434 Other schemes 5. Level of protection 51 Basic schemes 52 Supplementary schemes

"Decision-makers" refers to the unit that makes the most important decisions: the level of benefits, the terms on which they are paid and the ways in which the scheme is financed. The most important distinction is made between the government-controlled schemes and the non government-controlled schemes.

"Legal enforcement" refers to the rules laid down by legislation concerning the social provision, i.e. whether it is compulsory or non-compulsory.

"Establishment of entitlements" refers to the legal basis on which protected persons are eligible for benefits: conditional or not conditional on payment of their own contributions.

"Scope" refers to the part of the population which is protected by the social provisions (the whole population (universal), all or the majority of workers (general) or specific sections of the population (special)).

"Level of protection" refers to whether social protection schemes offer a basic or a supplementary level of protection. To a large extent, this criteria depends on both country and history as it can be difficult to determine what is meant by a basic scheme. In this system, the basic state pension is regarded as a basic scheme whereas other state pension benefits are considered supplementary benefits.

However, it is important to add that these data are not easy to find in the Danish administrative accounting data which form the basis for the Danish ESSPROS statistics. For this reason, Denmark has omitted many of the suggested classifications as the level of statistical uncertainty involved would be greater than acceptable.

#### Statistical multifunctionality

Classification according to the ESSPROS provides us with a range of extremely flexible statistical options, enabling us to identify the components of the benefit, the beneficiaries and the way in which it is financed. The ESSPROS is not merely a one-table system: it contains a classification of social schemes with a range of characteristics which can be freely combined to produce different types of statistics for analytical purposes. Moreover, the system is comparable with similar statistics from other countries.

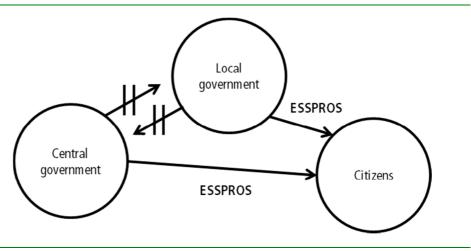
#### Practical calculation of social expenditure and income

Social expenditure can be calculated fairly precisely as the underlying source material, in the form of external accounts from the government, local government, regions, social funds and life insurance and pension companies, is typically based on functions and expenditure. On the other hand, the original source material does not always allow for a breakdown of social activities into means-tested and non meanstested benefits. Similarly, it is difficult to distinguish between short-term and long-term benefits based on the existing source material. In these cases, the main characteristic of the expenditure determines its rating in the statistics system as this newly revised system refrains from attempting artificial - and often arbitrary - classification of categories of expenditure and income. Experience also suggests that estimates are often subject to considerable uncertainty and that, over time, they grow increasingly distanced from reality. Expenditure is only split up, e.g. into long-term and short-term schemes or means-tested or non means-tested benefits, in cases where classification can be supported by alternative information, e.g. precise statistical information on the number of persons belonging to a sub-scheme.

Although a distribution base is not generally applied to the calculation of expenditure, an exception is made when determining local government administration costs associated with the social benefits in a broad sense. This is partly due to the fact that local governments usually collect all of their administrative functions in centralised civic centre units.

Much of the social expenditure is defrayed by local government even though all or part of the financing originally comes from the government. State pension payments are one example of this. In order to avoid inflation and double counting, the statistics system is organised such that expenditure on a social scheme, which features in the public accounts but is paid out to local government or one of the social security funds, is eliminated and does not appear in the statistics system until the amount is paid out to the end user, i.e. the protected persons.

Figure 2. Consolidation



#### Danish EU obligations to submit statistical data

Pursuant to EU Regulation No. 458/2007 of 25 April 2007 Denmark is obliged to provide a range of basic data to the EU annually. The final deadline for the transmission of data for the year N, together with any revision of the previous years, is 30 June of the year N + 2. However, Denmark has entered into a voluntary agreement to provide these data by the end of March of the year N + 2. At the same time, the EU has committed itself to publishing the national ESSPROS figures for the year N by 31 October of the year N + 2.

The EU also requires the compilation of an annual quality report which calls for a detailed description for each scheme of the qualitative information that is submitted to the EU as well as a detailed description of the benefits and information about new amendments and reforms. This quality report for the year N must be submitted to the EU together with data transmissions of the core system, i.e. on 30 June of the year N + 2 (end of March N + 2). Data on the quality of the statistics for the year N must be published by Eurostat by 31 October of the year N + 2.

As a supplement to the ESSPROS core system, countries must also submit to the EU a data module on pension beneficiaries. Pension beneficiaries are defined as recipients of one or more of the following benefits: disability pension, early retirement benefit due to reduced capacity to work, old-age pension, anticipated old-age pension, partial pension, survivors' pension or early retirement benefit due to labour market reasons. The statistics must be compiled each year. The data are population data at the end of the calendar year. The final deadline for submission of data for the year N is 31 May of the year N + 2, broken down by type of social benefit and by gender for the total of all schemes. However, the EU encourages countries to submit data as quickly as possible. The EU is obliged to publish the results of this compilation for the year N by 31 October of the year N + 2.

#### Compulsory reporting of net social expenditure

According to the 2011 edition of the ESSPROS Manual, the EU countries have a compulsory duty to report net social expenditure. As it is formulated in the scheme: "Information for the module on net social protection benefits should be obtained using the "restricted approach", in order to have the same population of beneficiaries of the gross social protection benefits collected in the core system." The new obligations require reporting of average itemised tax rate (AITR) and average itemised social contribution rate (AISCR), broken down by both the detailed classification of cash social benefits and the schemes listed in the "list of schemes". Residual fiscal benefits must be added to this (however, these are only to be provided if they are not directly accounted for in AITR and/or AISCR). Each residual fiscal benefit should be split by function, corresponding to the first level of classification.

From the beginning of 2010 onwards, data transmissions of net social expenditure and the associated quality report for the year N should reach the EU by 31 December of the year N+2 (cf. Commission Regulation No. 263/2011 of 17 March 2011).

It is important to stress that it is only possible to calculate net social benefits for cash benefits. This should be seen exclusively from the point of view of the beneficiary not from that of the state (which, in principle, could finance all benefits of this type via a traditional pay-as-you-go contribution). The reason for netting social expenditure is to provide a better basis for comparison of countries which may apply either net or gross payments in their social systems. There will be a significant difference in the value of cash benefits if pension payments, unemployment benefit and the like are taxable.

Net figures are determined by calculating tax rates which show the proportion of the various social benefits that is "taxed", and thus "repaid". Obviously, this calculation is

only an approximation as, in principle, benefits such as unemployment benefit are not taxed individually but as part of a person's total taxable income, which typically includes many elements in addition to cash social benefits - e.g. wages during the period in which the person is not unemployed, etc. Based on this, the Danish Ministry of Finance calculates - via the "Law model" - the so-called AITR contribution to the various cash benefits.

The same applies to AISCR contributions - payment of contributions to unemployment funds and early retirement pension. Regardless of whether a person who is insured against unemployment receives a salary or unemployment benefit, he or she will be required to pay both tax and contributions to an unemployment fund/early retirement pension. As described above, a proportion of the income tax will be applied to salary and another proportion to unemployment benefit.

#### Danish reorganisation of the ESSPROS in 2012

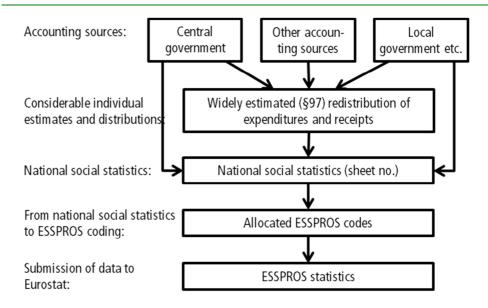
Statistics Denmark reorganised the Danish ESSPROS statistics in 2012. For the most part, the items in the local government and government accounts are the same. However, in contrast to the previous statistics, specific items of income and expenditure for a particular account are now recorded much more precisely. The new statistics only contain expenditure and income which are regarded in the National Accounts as transfer of income to households or an element of the individual government expenditure. In addition, in certain cases, the audit of all of the government's and local governments' accounts has led to a revision of the social function (health, family, survivors, etc.) to which the expenditure or income actually belongs. Some of the previous assumptions relating to financing have also been amended in order to reflect current financing rules to a greater degree. Moreover, the concept of income has been systematically changed so that it is more in line with the national accounting principle applied to statistics of government finances.

In conclusion, it can be said that there were several reasons for this reorganisation.

First and foremost, statistical systems that have been around for a number of years should be subjected to close scrutiny from time to time. Social practice and legislation, the distribution of work between central and local government and the external and internal conditions of social institutions are constantly being changed. As a result, statistical systems that are both standardised and repeated annually do not always pick up on changes coming from the outside. These may not mean so much in a specific year but may have a significant impact on statistical results over a number of years.

Before the reorganisation, due to the structure of the ESSPROS statistics, there was a very indirect connection to the accounting sources on which the statistics are based. Over time, this has meant that the connection to the underlying sources has suffered significant statistical uncertainty. It has also been difficult, and at times impossible, to establish a solid basis for documentation of the underlying accounting sources.

Figure 3. Code system before the reorganisation

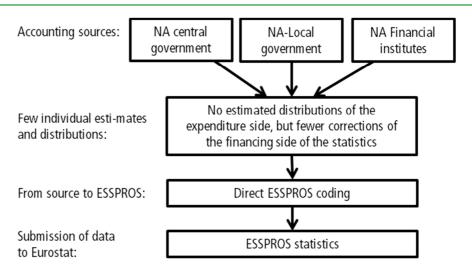


Result:

It is difficult to document the correlation between the accounting sources and the finished ESSPROS statistics, as the coding was conducted indirectly and through a number of uncertain estimates and distributions. The correlation to the National Accounts (NA) was also more or less impossible to document.

A separate objective of the reorganisation of the ESSPROS statistics was to establish a direct correlation between the underlying accounting sources and the National Accounts with associated accounting principles.

Figure 4. Code system after the reorganisation



Result:

A direct correlation can be established between the accounting sources and the finished ESSPROS statistics, and the correlation to the National Accounts can be specifically explained, as it is, in principle a satellite account to the NA.

The reorganisation is based on a radical review of the accounts of government, local government, social security funds and life insurance and pension funds in order to ensure that the material content of the accounts is consistent with the recommendations of the ESSPROS Manual to the greatest possible degree. As a

result, a good deal (in fact, the majority) of the underlying references to accounts have been retained in the revised version of the statistics. However, it was impossible to avoid the realisation that specific accounts were misplaced when compared with the recommendations of the manual and, as a result, they have been either moved or deleted. Similarly, the detailed review of the underlying source material has given rise to the incorporation of new financial information into the revised ESSPROS statistics.

As a result of the reorganisation, the source material for the ESSPROS statistics is now directly coded with the "authorised ESSPROS codes"; previously, the ESSPROS codes were derived indirectly from a statistical system formerly constructed for social expenditure. This system was abolished when the ESSPROS was reorganised as relevant and more detailed information can be derived from other statistics from Statistics Denmark.

The reorganisation has created a more transparent correlation to the National Accounts. Firstly, this was done by aiming for full compliance between the "cash benefits" in the ESSPROS and the social income transfers to households in the National Accounts, and by endeavouring to ensure that the benefits in kind in the ESSPROS are essentially in line with the National Accounts' concept of consumption (i.e. purchase of goods, sale of goods, wages and salaries, in-kind purchases). Secondly, the National Accounts' concept of taxation was incorporated into the reorganised ESSPROS. From the point of view of financing, this now means that the Danish labour market contribution is no longer regarded as a contribution by protected persons to various labour market provisions but is considered to be financed directly by the state as, for national accounting purposes, the labour market contribution is regarded as a perfectly ordinary gross tax on income.

These reorganisational initiatives have resulted in a break in a series. To begin with, the reorganised statistics only go back as far as 2007. Applying the new method of calculation to years prior to 2007 would be extremely costly due to the extensive changes that were brought about by abolishment of the administrative districts in the 2007 municipal reform.

# Explanation of the greatest changes brought about by the reorganisation during the 2010 census year

Statistics Denmark radically reorganised the social expenditure statistics in 2012. This has resulted in a range of changes compared to the previous statistics. For the sake of comparability, in this section we will examine the consequences that these changes have had for the 2010 census year. In 2010, according to the old method of calculation, total social expenditure amounted to DKK 568.6 billion and financing amounted to DKK 628.2 billion. In the new account, total social expenditure amounts to DKK 578.0 billion and financing amounts to DKK 671.6 billion.

This means that the total deviation between the methods of calculation in 2010 is 1.7% for expenditure and 6.9% for financing.

In the 2010 census year, social cash benefits amounted to DKK 335.2 billion according to the old method of calculation, and to DKK 335.6 billion according to the new method, which corresponds to an increase of 0.1%. However, this small fluctuation conceals significant differences in the various social functions. Cash benefits relating to old age increased considerably as, in contrast to the old method, the new method of calculation includes all privately organised pension and insurance companies which manage compulsory pension and life insurance schemes. On the other hand, cash benefits relating to unemployment and employment fell significantly as the various employment-related wage-subsidy schemes are not included as an element of social expenditure in the new method of calculation.

In the 2010 census year, social benefits in kind amounted to DKK 233.4 billion according to the old method of calculation, and to DKK 242.4 billion according to the new method, which corresponds to an increase of 3.8%. However, this small fluctuation conceals significant differences in the individual social functions. The greatest fluctuation is to be found in the unemployment and employment function. This is particularly due to the fact that the new method of calculation, which adheres strictly to national accounting principles (and the ESSPROS manual), regards a number of types of social expenditure as benefits in kind whereas the old system considered these same types of expenditure cash benefits. This expenditure is actually coded in the national accounts as wages and salary and purchase of goods.

Table 1. Comparison of the old and new statistics (expenditure) for 2010

	Old statistics New statistics		:S	Change in percent		t			
	In cash	In kind	Total	In cash	In kind	Total	In cash	In kind	Total
			DKK	million ——				— % ——	
Total	335 174,9	233 437,6	568 612,5	335 584,2	242 422,3	578 006,5	0,1	3,8	1,7
Sickness/healthcare	19 795,0	108 252,4	128 047,4	18 969,0	104 157,6	123 126,6	-4,2	-3,8	-3,8
Disability and rehabilitation	58 345,9	26 121,5	84 467,4	48 638,6	24 997,4	73 636,1	-16,6	-4,3	-12,8
Old age	179 761,5	34 461,9	214 223,4	204 077,0	39 428,7	243 505,7	13,5	14,4	13,7
Survivors	2,0	142,7	144,7	2,0	140,5	142,5	0,0	-1,5	-1,5
Family	27 597,5	43 050,3	70 647,8	29 692,4	46 215,9	75 908,3	7,6	7,4	7,4
Unemployment and employment	39 422,1	3 140,2	42 562,3	22 080,1	10 340,2	32 420,3	-44,0	229,3	-23,8
Housing	-	13 181,1	13 181,1	-	12 183,7	12 183,7	-	-7,6	-7,6
Other benefits	10 250,9	5 087,5	15 338,4	12 125,1	4 958,2	17 083,3	18,3	-2,5	11,4

Between the two methods of calculation, expenditure on disability and rehabilitation was radically adjusted downwards by DKK 10,8 billion, equivalent to 12,8%. There are several reasons for this. Firstly, following a thorough review of both the ESSPROS manual and the notes in the government and local government accounts, a large proportion of the expenditure that was previously allocated to disability and rehabilitation was moved to old age and family. In addition, the old method of calculation included expenditure with a collective purpose. These two types of expenditure are not included in the new statistics.

Expenditure on old age has been adjusted upwards by a total of DKK 29,3 billion, equivalent to an increase of 13,7 percent. This increase is primarily due to the fact that the old method of calculation did not include all of the privately organised pension and insurance companies which manage the majority of the compulsory pension and life insurance schemes existing in Denmark. The new method for calculating cash benefits has resulted in an increase of DKK 24.3 billion. In addition to this, the relocation of a number of benefits in kind in the local government and central government accounts contributes further to an increase in the old age function of DKK 5,0 billion between the two accounts. A significant proportion of this increase in expenditure originates from the reorganisation of the disability and rehabilitation function, which in turn is a result of a clarification of the concept of disability in the National Documentation Projects.

Expenditure on unemployment and employment has been adjusted downwards in the new statistics by DKK 10.1 billion, equivalent to a total fall of 23.8%. In essence, this downward adjustment can only be attributed to the previously mentioned processing of the extensive Danish employment schemes being handled by local governments.

Table 2. Comparison of the old and new statistics (financing) for 2010

	Government	Local government	Protected persons	Employers Pro	perty income	Total amount received
			DKK mil	lion —		
Total social expenditure and						
administration costs						
Old statistics	142 324,4	273 046,1	126 893,0	69 623,7	31 327,0	643 214,2
New statistics	300 616,6	208 145,6	84 677,3	78 681,6	26 005,8	698 126,9
Change in percent	111,2	-23,8	-33,3	13,0	-17,0	8,5
Total administration costs						
Old statistics	1 846,4	9 675,9	3 430,6	63,0	-	15 015,9
New statistics	4 593,0	17 182,0	4 729,5	-	-	26 504,5
Change in percent	148,8	77,6	37,9	-100,0	-	76,5
Total social expenditure						
Old statistics	140 478,0	263 370,1	123 462,4	69 560,7	31 327,0	628 198,2
New statistics	296 023,6	190 963,5	79 947,8	78 681,6	26 005,8	671 622,3
Change in percent	110,7	-27,5	-35,2	13,1	-17,0	6,9
Cash benefits						
Old statistics	118 693,6	51 716,9	123 462,4	69 560,7	31 327,0	394 760,6
New statistics	190 588,4	53 976,4	79 947,8	78 681,6	26 005,8	429 200,0
Change in percent	60,6	4,4	-35,2	13,1	-17,0	8,7
Benefits in kind						
Old statistics	21 784,4	211 653,2	_	_	_	233 437,6
New statistics	105 435,2	136 987,1	_	-	-	242 422,3
Change in percent	384,0	-35,3	-	-	-	3,8

With regard to financing, the greatest change is to be found in the distribution between central and local government - particularly with respect to benefits in kind. The reason for this shift is that, previously, expenditure on hospitals and a good deal of expenditure on healthcare services was mainly considered to be financed by local government. However, in reality, the Danish regions do not have an independent basis for taxation and, as a result, the majority of the financing is currently covered by central government.

Another significant change in relation to the old ESSPROS statistics is that the labour market contribution, which finances a significant proportion of the cash benefits for unemployment and employment in the new statistics in compliance with the recommendations of the National Accounts, is classified as a state gross tax, i.e. the benefits are regarded as financed by central government. These contributions were regarded as financed by protected persons according to the old method of calculation.

The calculation of administration costs associated with social expenditure has also been reorganised. The old method of calculation quite clearly underestimated local government administration costs for social protection purposes. This is partly due to the fact that local governments have collected the majority of their administration costs in so-called civic centre functions. In the new statistics, local government administration costs for social protection purposes are calculated as a percentage of the local government's total administration costs.

In overall terms, expenditure on administrative functions has increased by DKK 11.5 billion from the old statistics to the new statistics. DKK 9.8 billion of this amount originates from local government and regions.

**Annex 1: ESSPROS function used in Denmark** 

Code	Description	Schemes
	Sickness/Health care	
1111111	Paid sick leave non means-tested	3,21
1111112	Other cash periodic benefits non means-tested	22
1111211	Direct provision non means-tested	1,81
1111212	Reimbursement non means-tested	81
1111221	Direct provision of pharmaceutical products non means-tested	1,5
1111222	Other direct provision non means-tested	1,5,81
1111230	Other benefits in kind non means-tested	5
	Disability	
1121112	Early retirement benefit due to reduced capacity to work non means-tested	83
1121114	Economic integration of the handicapped non means-tested	17
1121123	Other cash periodic benefits non means-tested	4,11
1121201	Accommodation non means-tested	83
1121202	Assistance in carrying out daily tasks non means-tested	83
1121203	Rehabilitation non means-tested	5,83
1121204	Other benefits in kind non means-tested	5,83
1122115	Other cash periodic benefits means-tested	83
	Old age	
1131111	Old-age pension non means-tested	11,12,13,15,82
1131112	Anticipated old age pension non means-tested	9
1131113	Partial pension non means-tested	82
1131201	Accommodation non means -tested	82
1131202	Assistance in carrying out daily tasks non means-tested	81
1131203	Other benefits in kind non means-tested	82
1132111	Old-age pension means-tested	82
	Survivors	
1141111	Survivors' pension non means-tested	16
1142122	Other cash lump sum benefits non means-tested	16
1142201	Funeral expenses non means-tested	1
4454444	Family/children	24
1151111	Income maintenance in the event of childbirth non means-tested	21
1151113	Family or child allowance non means-tested	85
1151114	Other cash periodic benefits non means-tested	85
1151122	Parental leave benefit non means-tested	10
1151201	Child day care non means-tested	85
1151202	Accommodation non means-tested	85
1151204	Other benefits in kind non means-tested	85
1152201	Child day care means-tested	85
1161111	Unemployment Full unemployment benefit non means-tested	9
1161111	Vocational training allowance non means-tested	9 17,18
1161114	Vocational training anowance non means-tested  Vocational training non means-tested	
1161202	Placement services and job-search assistance non means-tested	18,86 86
	Housing	
1172212	Other rent benefits means-tested	87
	Social exclusion not elsewhere classified	
1181112	Other cash periodic benefits non means-tested	17
1181121	Other cash lump sum benefits non means-tested	16,17,19
1181201	Accommodation non means-tested	17
1181202	Rehabilitation of alcohol and drugs abusers non means-tested	5
1181203	Other benefits in kind non means-tested	17
1182111	Income support means-tested	17
1200000	Administration costs	20

## Annex 2: Contributions and other receipts used in Denmark

Code	Description
2220002	S. A. Martin Control accommon
2220002	Sector of origin: Central government
2220003	Sector of origin: State and local government
2121005	Sector of origin: Employees and Households
2122005	Sector of origin: Employees and Households
2110101	Sector of origin: Corporations
2410001	Sector of origin: Property income and Corporations

### Annex 3: Sociale schemes used in Denmark

	Name of scheme	Code
1	Sickness insurance	1111211
		1111221
		1111222 1142201
3	Sickness, employer's expenditures	1111111
<i>3</i>	Occupational injuries insurance	1121123
5	Hospital and health care, state+Disability, various subsidies, state	1111221
,	Trospital and Health care, state-bisability, various subsidies, state	1111222
		1111230
		1121203
		1121204
0	Hannalovanat funda	1181202
9	Unemployment funds	1131112 1161111
10	Promotion of employment - placement of unemployed in jobs	1151122
11		1121123
•	Tension ratios for certain occupations of initis, specific tubout anions/occupations	1131111
12	Civil servants pension, state	1131111
	Civil servants pension, municipalities	1131111
	Labour market supplementary pension	1131111
	Certain survivors [wartime fishermen's widows, state supported artists' widows]	
	and various compensations	1141111
		1142122
		1181121
17	Residential institutions for homeless, social assistance, refugees, etc.	1121114
		1161114
		1181112 1181121
		1181201
		1181203
		1182111
18	Labour market education - especially for unemployed	1161114
40	p (c. f. d. w. f. d. c. c. f. d.	1161202
	Benefits from the Wage Earners' Guarantee Fund	1181121
21	Administration  Sickday hopefits and maternity day hopefits, labour force	1200000 1111111
21	Sickday benefits and maternity day benefits, labour force	1151111
22	Voluntary sickday benefits insurance	11111112
81	Sickness, municipalities and regions	1111211
٠.	Stekness, manicipanties and regions	1111212
		1111222
		1131202
82	Old age pensions, incl. Partial pension - state and municipalities	1131111
		1131113 1131201
		1131201
		1132111
83	Disability and rehabilitation, state and municipalities	1121112
		1121201
		1121202
		1121203 1121204
		1121204
85	Child benefits, state and municipalities	1151113
	·	1151114
		1151201
		1151202 1151204
		1151204
0.0	Training of unemployed, start up incentives for unemployed, job offer schemes	1161202
86	2 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	
86		1161203