

## Net expenditure on social protection benefits.

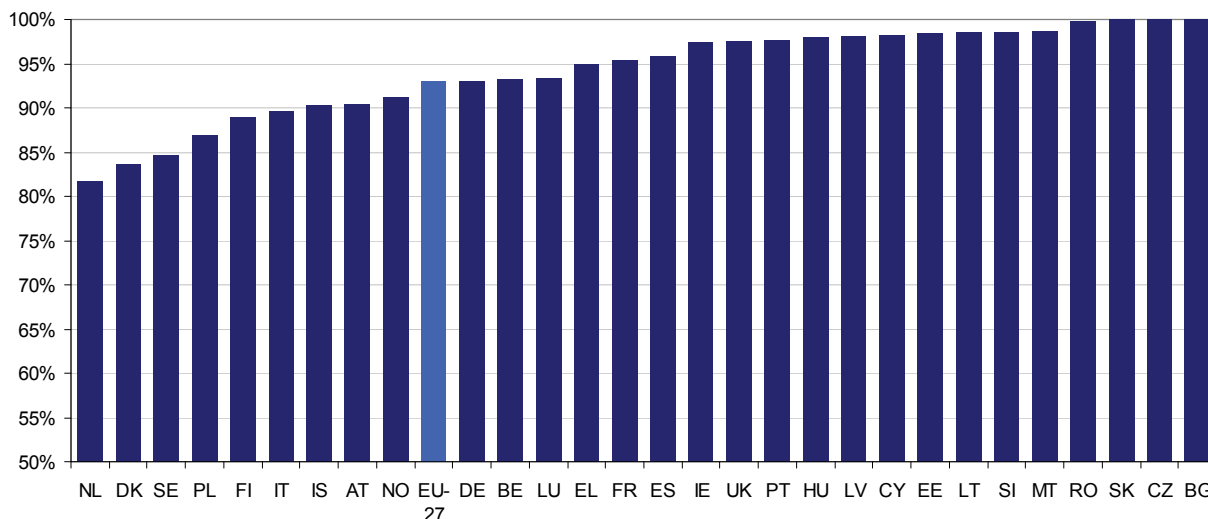
A pilot study shows that the equivalent of more than one quarter of EU GDP was spent on social protection benefits, but some of these benefits were liable to taxes and social contributions paid by the recipients to general government so that the net expenditure was less.

Eurostat has completed a first pilot data collection based on 2005 data in order to measure the effective rates of taxes and social contributions applied to each different type of benefit in order to evaluate the net value of expenditure on social protection benefits. The results must be treated as provisional but indicate that across the EU 7% of the gross expenditure on social protection

benefits was clawed back through the fiscal system.

More than half of the benefits issued in the EU were liable to taxes and/or social contributions. The majority of old age and survivors benefits were subject to some form of obligatory levy whilst only a small proportion of benefits in case of sickness or social exclusion were affected. The effective combined rate of taxes and social contribution applied to liable benefits averaged around 13% in the EU as a whole compared to 7% on all benefits.

Figure 1: Net expenditure on social protection benefits as % gross



Note: All data should be considered as provisional. Data for some countries may not be fully consistent with the methodology  
 IT – 2006 data; EL – results based on incomplete coverage  
 Source: Eurostat - Pilot data collection on net social protection benefits

## Net expenditure on social protection benefits in the EU was around 93% of gross expenditure

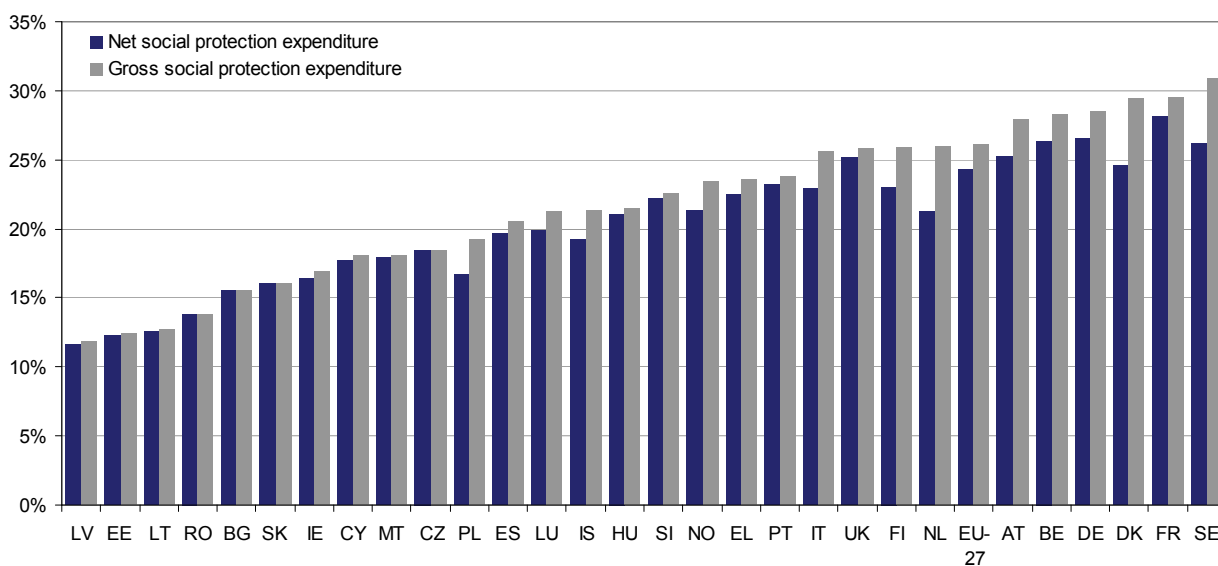
EU countries spent a total of over EUR 2900 billion, an amount equivalent to 26.1% of their combined GDP, on social protection benefits to support their citizens. However, measuring the gross amount of benefits disbursed and using this to make comparisons between countries can be misleading because of differences between countries in the way that benefits are treated as part of income liable to taxes or social contributions. In some countries all social protection benefits are exempt from all forms of obligatory levy whilst in others they are not, so that for the individual recipients the real value of benefits received is less than the amount disbursed as the government recoups part of the gross expenditure through the tax system.

Eurostat has collected data on gross social protection expenditure for many years through the ESSPROS system and in 2008 initiated a programme of work to start collecting data on the average rates of taxes and social contributions applicable to each of the different cash benefits and, from there, the net value of social protection expenditure. The methodology applied for the pilot data collection is the so-called “restricted approach” to measuring net benefits, which strictly measures the amount of taxes and social contributions levied on the gross benefits recorded in the ESSPROS Core system. It does not, therefore, take into account other tax reliefs for

social purposes which may reduce the amount of taxes paid on regular (non-benefit) income and therefore increase the net income of individuals/households. Such benefits may be considered in a future extension of the project.

Although the data must be considered as provisional because the methods used to calculate tax rates and the coverage of the tax system need to be improved in some countries, first results indicate that across the EU, net social protection expenditure in 2005 was around 93% of the gross expenditure (Fig. 1) meaning that governments clawed back over EUR 200 billion of benefit expenditure through taxation. However, the difference between gross and net expenditure varies considerably between countries. In Bulgaria, the Czech Republic, Slovakia and Romania benefits are either not taxed or so little affected that net expenditure is 99.8% or more of gross. On the other hand, net social protection expenditure is less than 90% of gross expenditure in six countries (the Netherlands, Denmark, Sweden, Poland, Finland and Italy) and less than 95% in a further five EU countries (Austria, Germany, Belgium, Luxembourg and Greece) and in Norway and Iceland. The sheer scale of social protection expenditure means that recouping part of the total amount disbursed through the fiscal system can have a significant impact on the net costs as a share of GDP (Fig.2).

**Figure 2: Net and gross expenditure on social protection benefits as % GDP**



Note: All data should be considered as provisional. Data for some countries may not be fully consistent with the methodology  
 IT – 2006 data; EL – results based on incomplete coverage  
 Source: Eurostat – Pilot data collection on net social protection benefits

In Denmark, the Netherlands and Sweden, the value of taxes and social contributions paid on benefits amounts to just over 4.7% of GDP and the difference between gross and net expenditure as a share of GDP is between 2 and 3 percentage points in a further six countries (Finland, Italy, Austria, Poland, Norway and Iceland). In general, the impact of taxes on gross expenditure is higher in those countries that spend more (as % GDP) on social protection so that the differences between high and low spending countries are reduced. Furthermore, by comparing countries in terms of their net rather

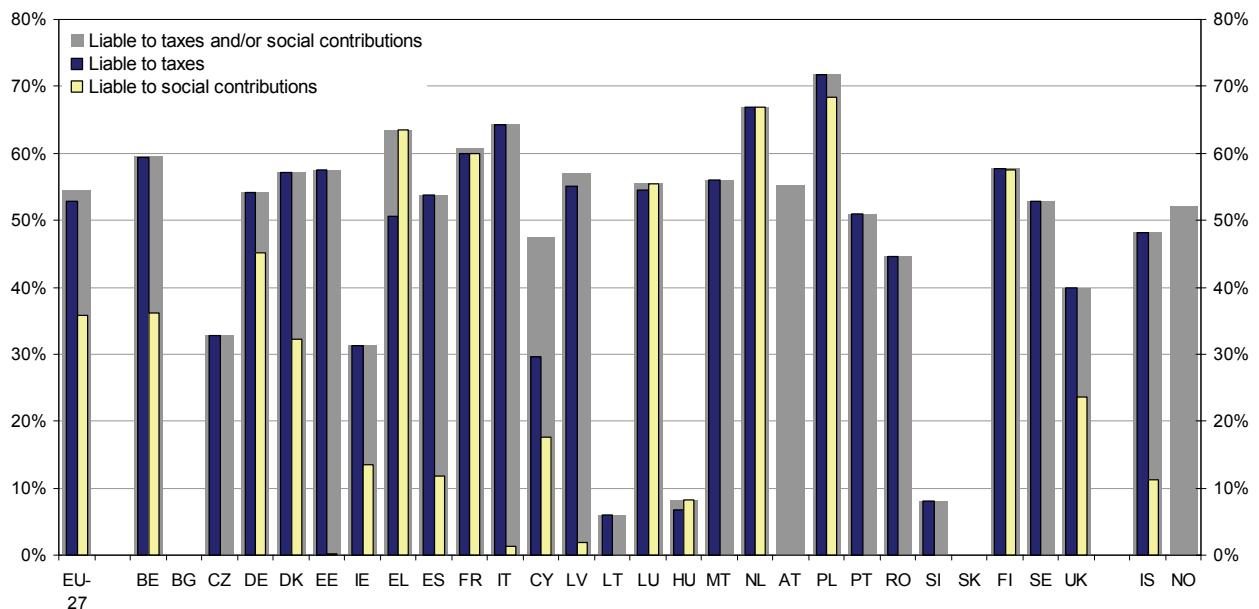
than gross social protection expenditure, the ranking by level of expenditure is significantly altered. In 2005, Sweden had the highest level of gross expenditure on social protection benefits in the EU (30.9% GDP) but only the fourth highest in terms of net expenditure behind France, Germany and Belgium. Indeed, France (28.1%) now stands out with net expenditure on social protection benefits higher than any other country. The Netherlands moves down the rankings of EU countries by six places and Denmark by four, whilst the UK rises from 9<sup>th</sup> to 6<sup>th</sup>.

### In the majority of EU countries more than half of all social protection benefits are liable to taxes and/or social contributions

The difference between gross and net social protection expenditure depends on the proportion of gross benefits that are liable to taxes and/or social contributions and the effective rates at which these levies are applied <sup>(1)</sup>. A little more than half

of all social protection benefits in the EU (54.5% by value) were potentially liable to some form of obligatory levy. Benefits are more commonly liable to taxes on income (52.8% of gross benefits) than to social contributions (35.8%).

**Figure 3: Proportion of social protection benefits liable to taxes and/or social contributions**



Note: All data should be considered as provisional. Data for some countries may not be fully consistent with the methodology. IT - 2006 data; EL - results based on incomplete coverage; AT & NO - breakdown between taxes and social contributions not available

Source: Eurostat – Pilot data collection on net social protection benefits

The proportion of benefits potentially liable to taxes and/or social contributions varies considerably between countries. In the majority of cases, between 40 and 60 percent of gross benefits are liable to some form of levy (Fig.3) but the proportion is over 60% in Greece, France, Italy, and the Netherlands and highest of all in Poland

(71.7%). The Czech Republic and Ireland both tax a little over 30% of benefits but Lithuania, Hungary and Slovenia tax less than 10% and in Bulgaria and Slovakia there is effectively no taxation of benefits.

<sup>1</sup> In figures 3 and 4, the grey bar represents the proportion of benefits that are liable to taxes and/or social contributions. The darkest bar represents the proportion of benefits liable only to taxes. The light bar stands for the percentage of benefits liable only to social contribution. In figures 5 and 6, the dark bar represents the effective combined rate of taxes and social contribution applied to those benefits that are liable to some form of levy; the light bar is the equivalent rate calculated on all the benefits supplied.

In all countries except Greece, Luxembourg and Hungary, a higher proportion of benefits is liable to taxes on income than to social contributions (Fig.3). In fact there are eight countries where no recipients of social protection benefits are liable to pay social contributions on the benefits that they actually received (Bulgaria, Czech Republic, Lithuania, Malta, Romania, Slovenia, Slovakia, Sweden). In some cases this is because the gross benefits are effectively already net of social contributions, which are deducted at source and re-routed within the benefit system and not paid out to

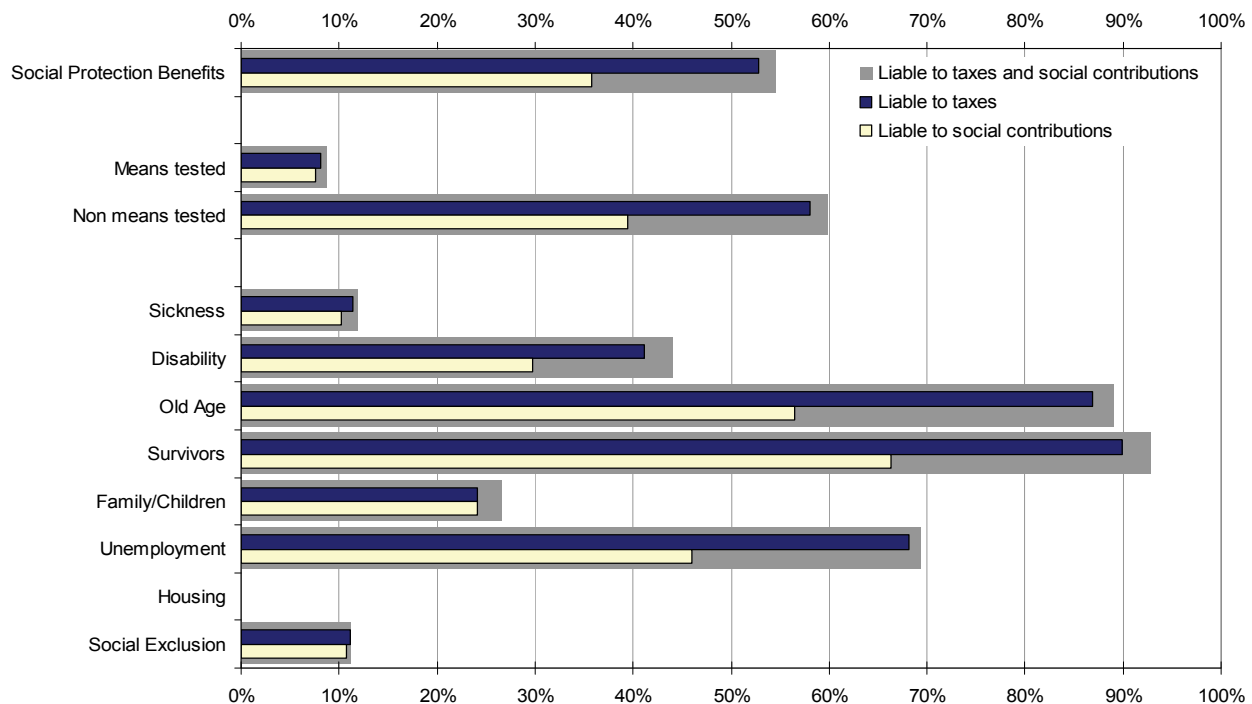
recipients. An example might be where contributions for sickness insurance based on the value of unemployment benefits are paid by the unemployment benefit scheme directly to the sickness scheme to ensure continued coverage for the affected workers. In the ESSPROS system re-routed contributions appear as an expenditure of one scheme and a receipt of another and therefore balance out so that the amount does not contribute towards gross expenditure on social protection benefits.

### Old age and survivors benefits are most often liable to taxes and/or social contributions

Within each country, the different types of social protection benefit may be subject to different regulations regarding the application of taxes and social contributions. Firstly, as might be expected, benefits that are means tested (i.e. payable only when individual/household income is below a

certain threshold) are generally not taxable – across the EU27 less than 9% of all means tested benefits are liable to taxes and/or social contributions compared to over 59% of non means tested benefits (Fig.4).

**Figure 4: Proportion of social protection benefits liable to taxes and/or social contributions by function, EU-27**



Note: All data should be considered as provisional.  
Source: Eurostat - Pilot data collection on net social protection benefits

Secondly, there are differences in the taxation of benefits depending on the risks that they aim to counteract. Survivors benefits (e.g. pensions paid to ensure a source of income after the death of a spouse) are almost always taxable (92.7%). The majority of old-age benefits (89.0%) and a significant proportion of unemployment benefits (69.3%) are also liable to taxes and/or social contributions. On the other hand, just over a quarter

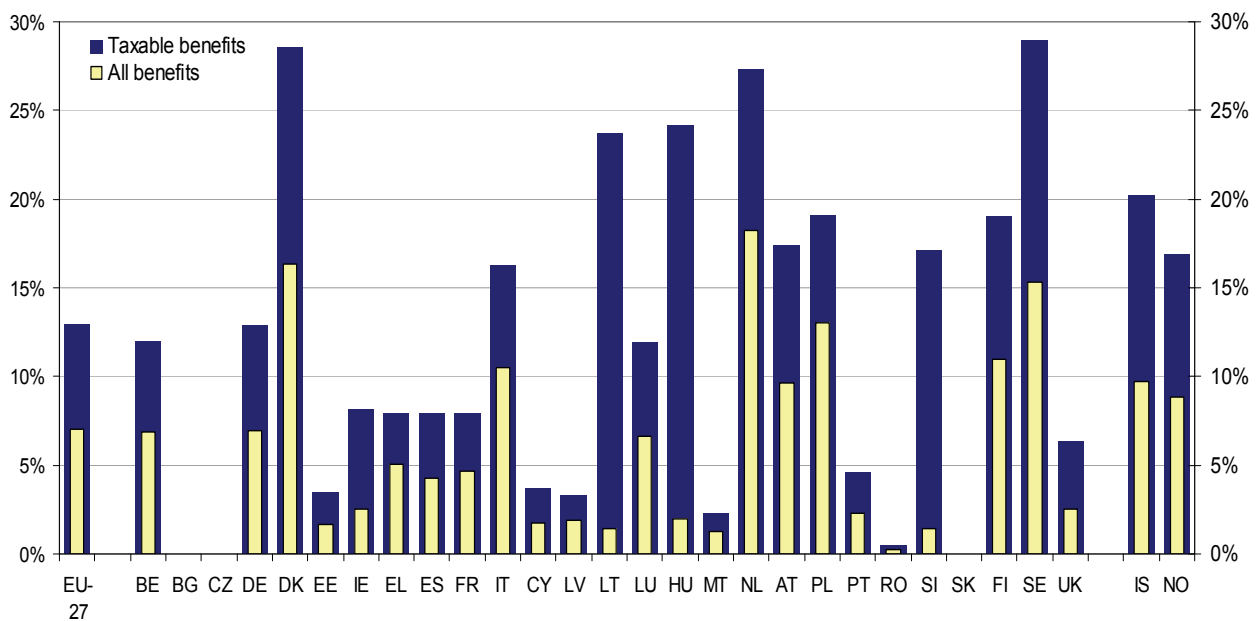
of family/child benefits (26.6%) and not much more than a tenth of benefits in case of sickness (11.9%) or social exclusion (11.1%) were taxable in 2005. Housing benefits are largely in the form of benefits in kind and are therefore not affected by taxation – at least insofar as it is covered by the pilot data collection which deals with taxation of cash benefits.

## Across the EU, taxable social protection benefits are subject to an effective combined tax and social contribution rate of 13%

Although more than half of all social protection benefits are potentially liable to taxes and/or social contributions, this does not mean that all recipients of those benefits pay taxes – many will have an income that is below the threshold at which taxes become payable and will therefore enjoy the full value of the benefits disbursed. The data collected by Eurostat attempts to take this into account and

measure the effective rate of tax and social contributions that apply to the total value of gross benefits paid out and, therefore, the net cost of those benefits. Across the EU, the effective combined rate of taxes and social contributions applied to those benefits that are taxable was 13.0% but there were considerable variations between countries (Fig.5).

**Figure 5: Effective combined rate of taxes and social contributions applied to social protection benefits**



Note: All data should be considered as provisional. Data for some countries may not be fully consistent with the methodology. IT – 2006 data; EL – results based on incomplete coverage.  
Source: Eurostat - Pilot data collection on net social protection benefits

Effective combined tax rates exceed 25% in three countries - Sweden (28.9%), Denmark (28.6%) and the Netherlands (27.4%) and are also over 20% in Lithuania (23.7%), Hungary (24.1%), and Iceland (20.2%). However, the value of taxable benefits is impacted by less than 5% in Portugal (4.5%), Cyprus (3.7%), Estonia (3.5%), Latvia (3.3%) and Malta (2.3%) and by less than 1% in Romania (0.5%) and the Czech Republic (0.01%). In general, social protection benefits that are taxable are cumulated with other income to form part of the tax base for regular taxes on income and are not subject to special rules (although a few exceptions exist). Low effective tax rates therefore may imply that a large proportion of the benefit recipients have income levels below or only just above the thresholds at which taxes become payable.

Moreover, as discussed above, the proportion of benefits that is liable to taxes and/or social contributions varies considerably and it is the combination of the effective tax rates applied to taxable benefits and the proportion of benefits that are taxable that determines the overall value of net benefits compared to gross. Therefore, even when the combined rate applicable to taxable benefits is quite high, the effective rate of tax on all benefits can be quite low if only a small proportion of benefits are taxable. This can be seen most strikingly in Lithuania and Hungary which both have some benefits that are effectively taxed at over 20% but because in both cases the taxable benefits amount to less than 10% of all benefits by value (Fig.3), the effective combined rate of tax applied to all benefits is just 2% in Hungary and

1.4% in Lithuania (Fig.5). In the EU as a whole, 54.5% of social protection benefits are liable to taxes and/or social contributions at an effective combined rate of 13.0% so that overall the effective

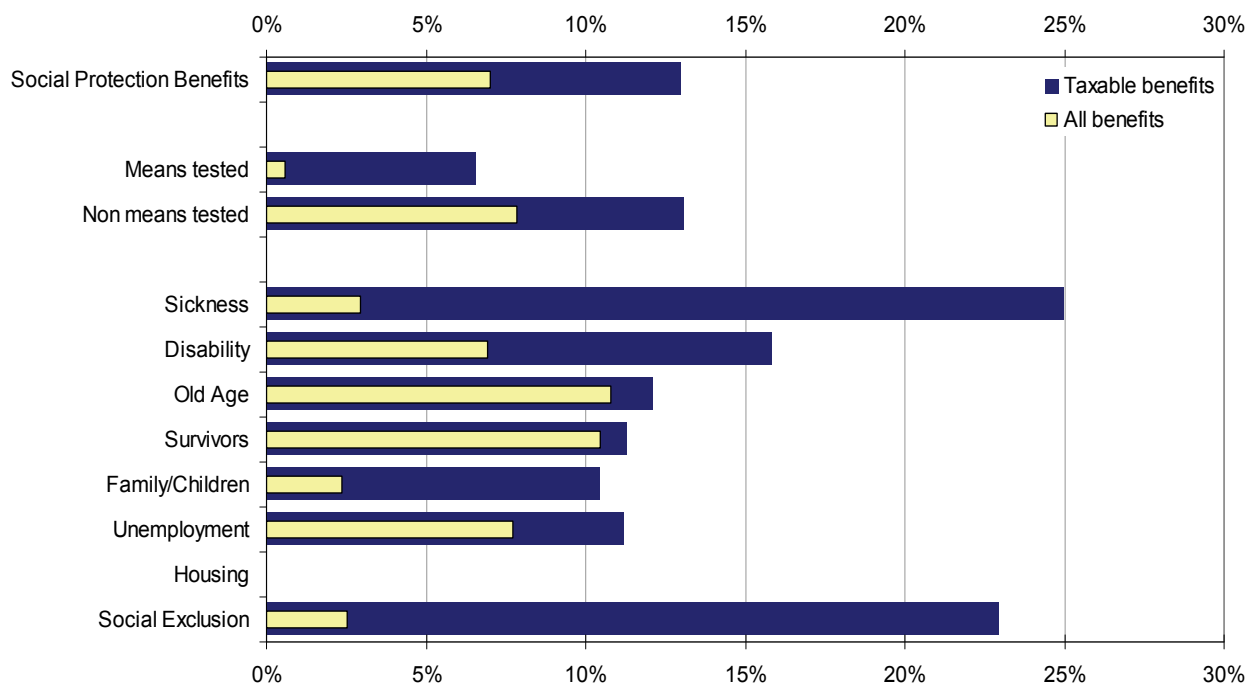
rate applied to all benefits is 7.0% and the final net value of social protection benefits is therefore 93% of the gross value.

### Effective combined tax rates are highest for sickness benefits but because only a small proportion is liable, the overall rate is low

The effective combined rate of taxes and social contributions applied to social protection benefits varies not only between countries but also between the different types of benefit and the risks that they are designed to counteract. On average across the EU, means-tested benefits that are liable to taxes and/or social contributions are subjected to half the effective combined tax rate that is applied to non means-tested benefits (6.5% and 13.1%

respectively, Fig.6), which probably reflects the likelihood that a much lower proportion of the recipients will have income over taxable thresholds. Moreover, because only a small proportion (8.8%) of means-tested benefits is liable to any form of levy (Fig.4) the effective combined rate applied to all means-tested benefits is just 0.6% compared to 7.8% for non means-tested benefits.

**Figure 6: Effective combined rate of taxes and social contributions applied to social protection benefits by function, EU-27**



Note: All data should be considered as provisional.  
Source: Eurostat - Pilot data collection on net social protection benefits

For benefits that are liable to taxes and/or social contributions, those issued in case of sickness or to counteract social exclusion are subject to the highest effective combined rates (25.0% and 23.0% respectively, Fig.6). The picture of social exclusion as a type of benefit liable to relatively high tax rates is perhaps surprising but it should be noted that such benefits are liable to taxes and/or social contributions only in four EU countries (DK, CY, LU and NL) and two of these (DK and NL) are countries where the effective rates are high on most types of benefits. In any case, for both sickness and

social exclusion the majority of benefits paid out across the EU are exempt from any kind of obligatory levy (Fig.4) so that overall the effective combined rates of taxes and social contributions applied to all benefits of these types are amongst the lowest – 3.0% for sickness benefits and 2.5% for social exclusion benefits. Indeed, the highest effective rates applicable to all benefits of a particular type apply to old age (10.8%) and survivors benefits (10.5%) which are the two functions with the highest proportion of benefits liable to taxes and/or social contributions (Fig.4).

## METHODOLOGICAL NOTES

### Methods and concepts: Background

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 neither a simultaneous reciprocal nor an individual arrangement is involved.

Expenditure on gross social protection benefits (i.e. the value of benefits disbursed before the deduction of any taxes and/or social contributions paid by recipients) is collected routinely by Eurostat in accordance with the methodology of the European System of Integrated Social Protection Statistics (ESSPROS). The ESSPROS methodology classifies social benefits under the following eight risks or needs: sickness/health care, disability, old age, survivors, family/children, unemployment, housing, social exclusion “not elsewhere classified” (n.e.c.).

A **cash benefit** is a benefit that i) is paid in cash and ii) does not require evidence of actual expenditure by the recipients. Benefits that require evidence of actual expenditure by the beneficiaries are reimbursements, which are classified as benefits in kind. Examples of cash benefits are all types of pensions, paid sick leave, parental leave benefits, etc.

**Benefits in kind** are benefits granted in the form of goods and services. They may be provided in the form of reimbursement or directly. Reimbursements are payments that refund the recipients in whole or in part for certified expenditure on specified goods and services. Directly provided benefits are goods and services granted without any pre-financing by the beneficiary.

Social benefits are broken down between means-tested and non means-tested benefits. Means-tested social benefits are social benefits which are explicitly or implicitly conditional on the beneficiary's income and/or wealth falling below a specified level.

### Methods and concepts: Net social protection benefits

In 2008, in accordance with [the Regulation EC No 458/2007](#) of the European Parliament and of the Council, Eurostat launched a programme of work to collect information on the taxes and social contributions paid on gross social protection benefits by recipients and, from there, the net value of social protection benefits.

The data in this publication derive from a pilot collection of this data for year 2005, which was based on a draft methodology that will be refined as a result of the experience. The methodology follows the so-called “restricted” approach to measuring net social protection benefits, which implies no change to the scope of the gross data collected through the ESSPROS Core system. It represents a strict conversion from gross expenditure to net expenditure after taking into account the value of taxes and social contributions paid on gross benefits by their recipients. By definition, the population of recipients of net and gross benefits must be the same.

There exist, however, social benefits that are implemented solely through the fiscal system and which are not included in the gross expenditure of the Core system because it covers only benefits paid in cash or in kind. Fiscal benefits may accrue to persons that do not receive any other social benefits and therefore enlarge the scope compared to the Core system. Fiscal benefits are therefore not included in the current data but Eurostat is planning a second stage of the work to measure net benefits according to the “enlarged approach”.

In the restricted approach, the net value of social benefits is derived by deducting from gross social benefits the part of the combined value of two forms of obligatory levy applied by general government to the income of fiscal units that relates to liable (cash) social benefits: *taxes on income* and *social contributions*. The value of obligatory levies to be deducted is calculated from tax and social contribution rates collected for individual benefits or groups of benefits and applied to gross expenditure such that:

Net social benefits = Gross social benefits \* (1 – AITR – AISCR)

where AITR / AISCR are the Average itemized tax / social contribution rates, which are calculated according to the following formula:

$$AITR_i = \sum_{tu=1,n} TI_{i,tu} / \sum_{tu=1,n} I_{i,tu}$$

Where I is the amount of income of type I, TI is the tax paid on that income, i is the type or category of income, tu is a fiscal unit with income of type I and n is the number of fiscal units with income of type i. Benefits that are not liable to taxes or social contributions always have a zero AITR/AISCR.

### Legal basis

For the first time in the 2008 collection (data for 2006) ESSPROS data (core system and modules) have been collected and disseminated according to the following legislation: 1) [Regulation \(EC\) No 458/2007](#) of the European Parliament and of the Council of 25 April 2007 on the European System of Integrated Social Protection statistics (ESSPROS). 2) [Commission Regulations \(EC\) No 1322/2007](#) and [No 10/2008](#) implementing the EP and Council Regulation.

### Remarks concerning the data

The 2005 data on gross expenditure used here were collected in conformity with the ESSPROS Manual 1996 during the 2008 data collection. Nevertheless the ESSPROS Manual issued in 2008 was applied by certain countries (BE, CZ, DK, DE, EE, IE, FR, IT, CY, LV, LT, LU, AT, PL, PT, FI, SE, UK, IS) in recording survivors' pensions to beneficiaries older than the (national) legal/standard retirement age as survivors'.

Furthermore, several countries revised the gross data used here during the 2009 data collection: CZ, DE, IE, CY, LV, LT, HU, MT, AT, PL, PT, RO, SK, FI, SE, UK, NO (year 2005) and IT (year 2006).

In some countries the methods employed to estimate tax and social contribution rates may not be fully consistent with the draft methodology adopted for the pilot data collection and in others the coverage of the tax system or its impact on selected types of benefit is incomplete. All results should, therefore, be treated as provisional.

The main data source for Italy is biennial and covers even years. All data for Italy therefore refer to 2006.

### Statistical symbols and abbreviations

EU 27 (European Union of 27 Member States from 1 January 2007) comprises Belgium (BE), Bulgaria (BG), Czech Republic (CZ), Denmark (DK), Germany (DE), Estonia (EE), Ireland (IE), Greece (EL), Spain (ES), France (FR), Italy (IT), Cyprus (CY), Latvia (LV), Lithuania (LT), Luxembourg (LU), Hungary (HU), Malta (MT), the Netherlands (NL), Austria (AT), Poland (PL), Portugal (PT), Romania (RO), Slovenia (SI), Slovakia (SK), Finland (FI), Sweden (SE) and the United Kingdom (UK).

IS = Iceland, NO = Norway.

## Further information

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Eurostat Website: <http://ec.europa.eu/eurostat>

Data: Eurostat ESSPROS Circa Group

[http://circa.europa.eu/Public/irc/dsis/esspros/library?l=/collection\\_benefits/benefits\\_collection\\_1&vm=detail&sb=Title](http://circa.europa.eu/Public/irc/dsis/esspros/library?l=/collection_benefits/benefits_collection_1&vm=detail&sb=Title)

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