

# An Analysis Of Detailed Income Components In EU-SILC

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## An Analysis of detailed income components in EU-SILC

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**Abstract**: EU-SILC (EU Statistics on Income and Living Conditions) is the EU reference source for comparative statistics on income distribution and social inclusion at the European level. While poverty, deprivation, work intensity are widely disseminated, data on income, collected at a very detailed level are currently not completely exploited in dissemination. Only datasets on median equivalized income and quintiles are currently disseminated. We analysed the different income components collected in EU-SILC in order to identify trends, patterns and to assess quality and comparability of this detailed information. The main results of this analysis are presented in the paper as well as the group of components chosen for dissemination.

#### 1. Introduction

EU-SILC (EU Statistics on Income and Living Conditions) is the EU reference source for comparative statistics on income distribution and social inclusion at the European level. While poverty, deprivation, work intensity are widely disseminated, data on income, collected at a very detailed level are currently not completely exploited in dissemination. Only datasets on median equivalized income and quintiles are currently disseminated. Actually, while some aspects of living conditions are more clearly understood by the general public, as for instance, material deprivation, income distribution statistics sometimes entail concepts difficult to be communicated. Hence income distributions are normally only published in Eurostat's dedicated section on EU-SILC, while the at-risk-of poverty or any of the Europe 2020 indicators are disseminated more extensively in press releases and Statistics in Focus (SIFs) too, not only because they are of higher policy relevance but also because they are generally clearer to be communicated.

Consequently, we have started working towards a better dissemination of income components statistics with the aim of targeting a better income distribution dissemination. The final aim is to help the general public to better understand what the distribution of income is and how is the contribution of income components in each country and across Europe.

## 2. MAIN CONCEPTS

A detailed breakdown of all income components is not possible given the current configuration of EU-SILC. It is therefore proposed to group the components by broad groups, in order to ensure quality, as indicated below.

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<sup>&</sup>lt;sup>2</sup> The content of this study does not reflect the official opinion of the European Union/Eurostat. Responsibility for the information and views expressed in the study lies entirely with the authors.

**Total Household Gross Income** is divided into four sources: income from employment, from pensions, from benefits and allowances as well as income from other sources. Each component is defined as follows:

- 1. **Income from employment**: Employee cash or near cash income (PY010) + Company car (PY021) (as from 2007 operation) + Cash benefits or losses from self-employment (PY050).
- 2. **Income from pensions**: Pension from individual private pension plans (PY080) + Old-age benefits (PY100) + Survivor` benefits (PY110).
- 3. **Income from benefits and allowances**: Family/children related allowances (HY050) + Social exclusion not elsewhere classified (HY060) + Housing allowances (HY070) + Unemployment benefits (PY090) + Sickness benefits (PY120) + Disability benefits (PY130) + Education-related allowances (PY140).
- 4. **Income from other sources**: Income from rental of a property or land (HY040) + Regular inter-household cash transfer received (HY080) + Interest, dividends, profit from capital investments in unincorporated business (HY090) + Income received by people aged under 16 (HY110).

For each income component the weighted arithmetic average and the share on total income are computed. Incomes are not equivalized. Zero values greatly influence averages and have been excluded from average calculations while they are kept for computing shares. The cross-sectional weight DB090 is being used for this purpose.

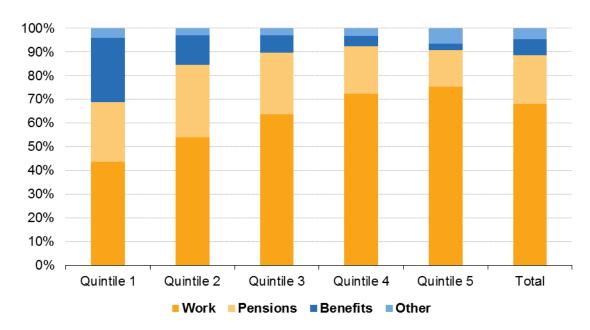
#### 3. MAIN STATISTICAL FINDINGS

For the analysis of the income components, we look at the breakdowns by different sub-populations such as income quintile groups, household composition and the degree of urbanisation for 2014.

### 3.1. Distribution by sources of income by quintile income groups

In 2014, the main source of income in the EU-28, is employment (68%), followed by pensions (20.6%); benefits (6.8%) and other sources (4.5%). The distribution of income components across the income quintile groups for the EU-28 follows a slightly different pattern: Although work remains the main source of income; the shares range from 43.5 % in the lowest quintile to 75.3 % in the highest quintile. The second biggest disparity across the quintiles can be observed in the income from benefits: as expected, it is households in the first income quintile who receive the highest share of its total income from this source (26.9 %), whereas the lowest share (2.7%) is observed in the subpopulation receiving the highest share of equalized disposable income (fifth quintile). Regarding the two remaining sources of income, pensions and other sources, the differences in rates are not as wide with the highest quintile receiving 15.3 % of its income from pensions compared to the 25.4 % for the first quintile.

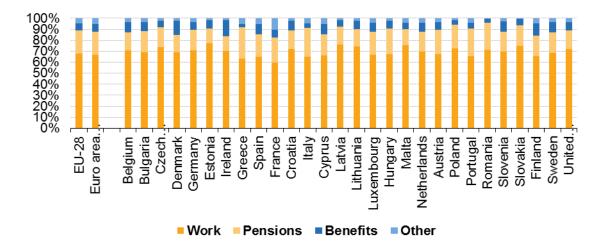
Figure 1: Share of income components by income quintiles groups EU-28, 2014 (% share of the total household gross income)



The highest share of pensions (30.5%) is received by the second quintile. The highest share of income from other sources is received by the fifth income quintile (6.6%); followed by the first quintile (4.2 %) and the fourth (3.1%) while second and third quintiles receive the same share (2.9%), also shown in Figure 1.

The majority of the EU Member States report a similar pattern (Figure 2). Work constitutes the main source of income relative to all income components for households across all the Member States and non-member states ranging from 63.2 % in Greece to 77 % in Estonia. The differences in income shares originating from pensions were wider across the countries (from 13.4% in Estonia to 28.7 % in Greece); followed by benefits (2.9 % in Greece to 13.6 % in Ireland) whereas the income from other sources constitutes a relative small share of the households' total income on average across all the EU Member States, with the lowest being in Romania (0.5 %) and the highest in Cyprus (5.2 %), sign that the coverage of the survey for these components needs to be improved.

Figure 2: Shares of income components, 2014 (% share of the total household gross income)



Analysing by quintiles, the data show that in all Member States, the top 20% households' main source of income is employment, ranging from 57.3% in France to 90.5 % in Estonia. The composition and shares of income sources show a certain variation when we look at the bottom 20% of households. In six Member States, we can observe that the households with the lowest share of equalized disposable income, have other income sources than employment. In Latvia and Estonia it is pensions that constitute the greatest share of income for these households (42.8 % and 45.6 % respectively) whereas in Denmark (38.6%), Belgium (40 %), Finland (38.9%) and Ireland (60.4 %) benefits exceed the employment share (as also shown in Table 1).

Pensions as source of income among the households with the highest share of income (fifth quintile) show a relative low share with the lowest being in Estonia (2.7 %) and the highest being Portugal (22.9 %). Pensions play a much bigger role among the bottom 20% of the households ranging from 10 to 50 percent (10.5 % in Luxembourg to 45.6% in Estonia). In about half of the Member States, pensions as a source of income constitute a smaller share than benefits among the bottom 20% of households, as can be seen in Table 1.

Table 1: Shares of income components by quintile 1 and quintile 5, 2014 (1) (% share of the total household gross income)

	Quintile 1				Quintile 5			
	Income components				Income components			
	Work	Pensions	Benefits	Other	Work	Pensions	Benefits	Other
EU-28	43,5	25,4	26,9	4,2	75,3	15,3	2,7	6,6
Euro area (EA-19)	43,8	24,5	26,8	4,9	72,1	16,8	3,0	7,9
Belgium	29,6	27,5	40,0	2,9	85,0	7,9	2,4	4,7
Bulgaria	44,2	34,3	15,5	6,0	80,1	10,1	6,4	3,4
Czech Republic	42,7	35,3	18,8	3,3	89,5	5,4	2,2	3,0
Denmark(2)	32,8	33,4	38,6	-4,8	79,9	9,3	3,9	6,9
Germany	38,1	25,9	30,4	5,2	79,8	12,5	2,4	4,4
Estonia	31,7	45,6	20,0	2,7	90,5	2,7	5,1	1,8
Ireland	25,5	12,9	60,4	1,3	82,5	11,1	3,3	3,1
Greece	57,2	24,8	9,9	8,1	72,5	21,1	1,1	5,4
Spain	49,1	14,9	30,1	5,9	71,9	16,0	6,0	6,2
France	44,9	22,0	27,8	5,4	57,3	21,3	2,6	18,9
Croatia	42,2	29,5	24,3	4,1	83,8	10,0	4,1	2,1
Italy	56,2	28,3	12,0	3,5	69,3	22,0	2,7	6,1
Cyprus	44,8	30,4	16,4	8,4	64,4	21,5	9,1	5,0
Latvia	38,8	42,8	16,1	2,3	87,1	7,6	3,6	1,7
Lithuania	41,7	34,6	21,1	2,6	88,1	4,7	3,9	3,3
Luxembourg	54,1	10,5	30,2	5,2	71,7	18,9	3,0	6,5
Hungary	51,0	15,3	30,0	3,7	78,1	16,6	2,8	2,5
Malta	39,6	29,8	26,4	4,2	88,6	5,2	1,4	4,9
Netherlands	36,6	20,5	36,6	6,3	79,2	12,8	2,3	5,7
Austria	43,6	25,4	26,5	4,4	75,3	17,3	2,7	4,8
Poland	57,5	24,5	15,2	2,9	84,5	12,1	1,2	2,2
Portugal	46,3	29,2	19,4	5,1	69,7	22,9	2,6	4,7
Romania	60,0	19,6	18,9	1,6	77,7	20,4	1,4	0,4
Slovenia	42,0	27,4	27,9	2,8	78,4	12,9	4,3	4,3
Slovakia	52,9	25,5	19,9	1,8	89,7	7,4	2,6	0,3
Finland	26,1	32,9	38,9	2,2	75,9	11,0	3,4	9,7
Sweden	33,4	32,0	32,8	1,8	77,4	13,4	2,6	6,6
United Kingdom	35,0	27,9	33,6	3,5	83,1	10,3	1,8	4,9

<sup>(1)</sup> Some of the shares are not adding to 100 % due to rounding

In the fifth quintile, the benefits make a small proportion per household with the lowest being Greece (1.1 %) and highest observed in Cyprus (9.1 %). At the contrary, benefits make between 10 to 60 percent of the households total gross income in the first (lowest) income quintile. In eleven Member States, these households receive more than thirty percent of their income from benefits (Hungary, Spain, Luxembourg, Germany, Sweden, United Kingdom, the Netherlands, Denmark, Finland, Belgium and Ireland, see also Table 1). The share of income from other sources is highest in the fifth quintile in France (18.9%), where this component is extracted from a register; whereas in the first quintile the component 'other' make between 0 to 8 % of the households income with the highest observed in Cyprus (8.4%).

<sup>(</sup>²) The negative income components for Denmark are mainly due to self-employment and tax adjustments for the income source 'other'.

## 3.2. Distribution by sources of income by household types

The income components are not uniformly distributed between households with different composition of adults and dependent children<sup>3</sup>, as can be seen from Figure 4. For the EU-28 as a whole, households with dependent children is the group whose total gross income is to a greatest share based on employment (84.2%), followed by households composing of a single person with dependent children (65.9%). The share of benefits is the highest among the group of single persons with children (22.1%). On the other hand, pensions as source of income make a greatest share for households composed of a single person without children (35.9%) as well as households without children regardless of the number of adults (31.9%). The share of income from other sources is greatest for single person household with dependent children (8.1%), followed by single persons (6.18%), then households without children (5.3%) and lastly for people with dependent children (3.2%).

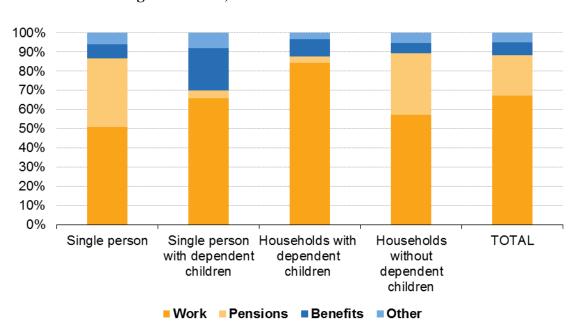


Figure 3: Share of income components by household types EU-28, 2014 (% share of the total household gross income)

In summary, we can see that employment is the main source of income for households with children and for single persons with children. This picture is also confirmed at the country level, i.e. households with children have a highest share of employment of their total gross income in all the Member States and non-member states. This is also the case for single persons with dependent children with the exception of the UK, Ireland and Cyprus where single person households without children have a slightly higher share of employment as an income source. A similar pattern apply for benefits, i.e. if there are children in a household (both for single person households and households with

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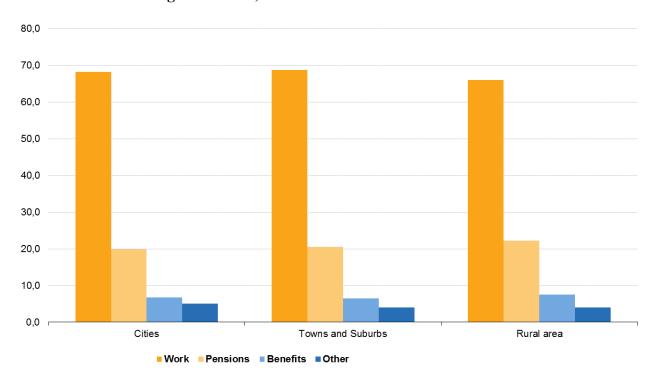
<sup>&</sup>lt;sup>3</sup> All persons aged less than 18 are considered as dependent children, plus those economically inactive aged 18-24 living with at least one of their parents

dependent children), the share of benefits is higher compared to households without children with only two exceptions, namely Denmark and the Netherlands in which households without children have a slightly higher share of benefits of its total gross income.

## 3.3. Distribution by sources of income by degree of urbanisation

At EU-28 level, there is almost no difference in the EU-28 rates for the different income components between the three types of areas, i.e. densely populated areas (cities), intermediate urbanised area (towns and suburbs) and thinly-populated area (rural area). The largest share of households' total gross income is employment regardless of the degree of urbanisation (68.2% for cities, 68.7% for towns and suburbs and 66 % for rural area); followed by pensions (19.8%, 20.6% and 22.2%), next is the component of benefits (6.8%, 6.5% and 7.6%). The smallest share of the total gross income across all the areas is the income source 'other' which is highest in the cities (5.1%); followed by almost the same shares for towns and suburbs and rural area (4.0% and 4.1% respectively), as shown also in the Figure 4. Across EU Member States the patterns are similar, the data show the widest difference in the shares for the income component from pensions in the rural area (ranging from 14.8% in the rural area of Estonia to 34.1% in rural area of Greece). Regarding the income from employment, the biggest spread is found in the cities (ranging from 59.5 % in the cities of France to 79.7% in the cities of Estonia). In summary, the greatest variation in shares is found for pensions between the rural areas, followed by cities and lastly by towns and suburbs across Member States.

Figure 4: Shares of income components by degree of urbanisation EU-28, 2014 (% of the total household gross income)



#### 4. CONCLUSIONS

The results presented in this paper are meant to address several needs on more detailed information on income distribution, most notably among sources of income. The figures, even if preliminary, are meaningful and interpretable. A continuous effort to keep the quality of income components variables high and to improve it where necessary will be beneficial to further improve the quality of the proposed datasets.

In terms of presentation and communication Eurostat will disseminate these results in a Statistics Explained article and in datasets in Eurobase later this year.

#### References

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