



Methodological paper

Measuring work intensity

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ABSTRACT

Combining the employment status of household members of working age in a single measure is an important indicator given that earnings from employment is the major source of household income and that households most at risk of poverty are those where such earnings are relatively low or non-existent. The EU-SILC includes such a measure of the work intensity of households but it takes account only of the number of months during the income reference year in which household members were employed and makes no allowance at all for whether they worked full-time or part-time. The concern here is to propose a new measure of work intensity which allows explicitly for part-time working and, accordingly, throws more light on the relationship between the employment characteristics of households and their income levels. This measure, like the existing one, is based on data contained in the EU-SILC on the employment status of individuals during each month of the preceding year and combines these data with details of the usual hours they work per week in their main and any additional jobs.

Measuring work intensity

I. Introduction

The extent to which people living in a household are employed is a major determinant of their level of income. Despite the fact that in all EU countries social security systems provide a measure of protection for those of working age who are not in employment, the income support involved in a number of cases is far from being universal and in others is not necessarily on a scale which would prevent income from falling below the poverty threshold. In consequence, it is useful to have an indicator which summarises the employment status of working-age household members which can be used to provide an explanation of why their income might be relatively low.

Such an indicator is included as a calculated variable in the EU-SILC database. While, however, the variable measures the extent to which those of working-age in a household taken together were employed during the year to which the data on income relate, it does not give any indication of whether those concerned worked part-time or full-time, which is clearly likely to affect the earnings they contribute to household income. Although it purports to measure the work intensity of households, in the sense of the paid employment undertaken by household members in relation to the work they would have undertaken if they had been employed throughout the year, by leaving the hours worked out of account, it gives only a partial insight into this. Accordingly, it treats those employed for, say, only 8 hours a week during the year in the same way as those employed for 40 hours a week, despite the likelihood that the contribution they make to household income will be very different.

The concern here is to propose an alternative measure of the work intensity of households which takes explicit account of hours worked and which can, therefore, be used to provide an improved insight into the relationship between employment and household income and into the extent of 'in-work' poverty or the relative number of so-called 'working poor' – of those whose income falls below the poverty threshold despite them being in employment.

II. Calculation of a new indicator of work intensity

The measure of work intensity included as a variable in the EU-SILC database, as indicated above, allows for the number of months worked during the income reference year but makes no allowance for part-time working or the number of hours usually worked per week. The proposed alternative measure is similar to the EU-SILC variable but makes an explicit adjustment for hours worked if they are less than full-time hours (taken to be 35 hours a week or more). It is calculated to cover all members of households aged 18-64 and summarises their employment status during the preceding year (the year to which income relates). The formula is:

$$\sum_{18}^{64} \frac{fitem_i + a_i * ptem_i}{fitem_i + ptem_i + unem_i + stm_i + rm_i + inacm_i}$$

where:

fitem=total months in full-time employment of each household member aged 18-64 over the year

ptem=total months of each household member in part-time employment over the year

a_f = weight applied to represent usual working hours of household members employed part-time relative to full-time hours (i.e. average usual hours spent in part time employment per week/35 – 35 being taken as the minimum number of full-time weekly hours), which has a maximum value of one (when usual hours worked are equal to full-time hours)

$unem_f$ = total months spent unemployed of each household member over the year

stm_f = total months spent studying of each household member over the year

rm_f = total months spent in retirement of each household member over the year

$inacm_f$ = total months spent in inactivity of each household member over the year

All the data used to calculate the measure come from the EU-SILC database which gives details of the employment status of each individual aged 16 and over the preceding year, including whether they worked full-time or part-time.

The weight applied to those working part-time during the previous year (which in the measure included in the EU-SILC database is implicitly taken to be one) is based on their average usual hours worked each week at the time of the survey in both their main job and any additional job(s). It is assumed, therefore, that the hours in question are the same as those usually worked during the reference year. While this in some cases may not be a valid assumption, it is analogous to the assumption made in the calculation of household income that the composition of the household was the same in the reference year as at the time the survey was undertaken. In cases where someone worked part-time for at least one month during the reference year but currently works full-time or does not work at all, an average estimate of part-time hours is used as a weight, taking explicit account of the characteristics of the person concerned – i.e. whether they are a man or women and the broad age to which they belong.

A second, much more minor, difference from the EU-SILC measure is the inclusion of months spent in full-time education in the denominator of the formula, which are excluded from the former measure. Because of this and, more importantly, the explicit allowance for part-time working, the estimates of work intensity calculated using the proposed measure will in a number of cases be less than indicated by the measure included in the EU-SILC database.

The new measure, therefore, just like the existing one will give a value of one if all members of a household aged 18-64 were employed full-time throughout the preceding year and a value of zero if no-one of working age was employed. It will give the same value as the existing measure if all those in work in a household were employed full-time but they worked for only part of the year, but it will give a lower value if anyone of working age was employed part-time for any or all months during the year.

In addition, a slightly different grouping of the estimated values for the work intensity indicator is used as compared with the variable published in the database in order to provide a more meaningful division. The database, therefore, groups households into four categories of work intensity – 0, 0-0.49, 0.5-0.99 and 1 – which means that it is not possible to distinguish couple households where only one person is working throughout the year (included in the 0.5-0.99 group) from those in which both people are working but one of them works 11 months instead of 12 (also included in the 0.5-0.99 group). The proposed new division, therefore, enables households with a work intensity of 0.5, where only one person in a couple household, usually the man, works full-time and the other, usually the woman, does not work at all – i.e. the traditional ‘male breadwinner’ model – to be distinguished from those in which both are working:

	<i>Work intensity</i>					
Existing grouping	0	0.01-0.49	0.50-0.99	1		
Proposed grouping	0	0.01-0.49	0.5	0.51-0.80	0.81-0.99	1

In addition, there is a case for including an extra grouping to distinguish couple households where one person is working full-time and the other is working only a few hours a week from those in which one person is working full-time and the second person is working more than 21 hours a week (someone working 21 hours living with someone working 35 hours more a week giving a work intensity of 0.8 to the household).

Comparison of new and existing measures

The distribution of people living in households with different levels of work intensity defined by the measure proposed here differs from that generated by the existing measure mainly according to the varying importance of part-time working. The difference, in other words, is largest in countries, such as the Netherlands, in particular, where the relative number of people working part-time is greatest.

To begin with the existing measure, in 2007, some 47% of those aged 18-64 in the EU25 lived in households where work intensity was 1, i.e. where everyone of working age was in employment throughout the preceding year (Table1). This proportion was around 63-65% in Denmark, Sweden and the UK and was less than 40% only in Greece, Spain, Italy, Hungary and Poland, though in each case, around 35% or higher. In all of the latter 5 countries, however, a relatively large proportion of people lived in households with work intensity of 0.50 to 0.99. Accordingly, relatively few lived in households with work intensity of less than 0.5 in any Member State – only 20% of people in this age group in the EU25 as a whole and 25% or below in all countries.

The new measure gives a somewhat different picture. Once account is taken of part-time working, the proportion of people living in households with work intensity of 1 falls significantly from 47% to 28% across the EU25 as a whole (Table2). Only in Denmark and Sweden does the proportion exceed 40% and there are 5 countries – Belgium, Germany, Ireland, Italy and Poland – where the proportion is less than 25% and another 4 (Greece, Spain, Luxembourg and Austria), where it is less than 26%.

Table 1 Distribution of those aged 18-64 by work intensity of household on existing measure, 2007

% Total aged 18-64

	Working intensity - existing measure			
	0.00	0.01-0.49	0.50-0.99	1.00
Belgium	17.1	7.0	28.4	47.4
Czech Rep	10.8	6.8	35.5	46.9
Denmark	14.8	2.2	20.0	62.9
Germany	14.8	4.7	28.3	52.2
Estonia	7.7	5.0	35.4	51.9
Ireland	11.8	7.4	38.9	41.9
Greece	9.1	12.4	42.7	35.8
Spain	6.8	10.5	44.2	38.5
France	13.4	7.0	29.8	49.8
Italy	12.9	11.8	39.3	36.0
Cyprus	5.0	7.4	43.5	44.1
Latvia	7.5	6.0	36.5	50.0
Lithuania	7.9	7.6	32.3	52.2
Luxembourg	8.3	5.4	39.4	46.9
Hungary	13.6	9.8	38.3	38.4
Netherlands	12.6	7.0	36.6	43.8
Austria	12.2	7.4	37.3	43.1
Poland	12.0	13.0	40.2	34.9
Portugal	8.3	9.3	38.8	43.6
Slovenia	10.6	9.7	35.6	44.1
Slovakia	9.6	6.9	35.6	47.9
Finland	10.9	7.0	33.7	48.4
Sweden	6.9	4.0	23.8	65.3
UK	13.1	3.3	18.9	64.7
EU25	12.2	7.7	32.9	47.2

Source: EU-SILC 2007

Table 2 Distribution of those aged 18-64 by work intensity of household on new measure, 2007

	% Total aged 18-64			
	Working intensity - new measure			
	0.00	0.01-0.49	0.50-0.99	1.00
Belgium	17.0	16.0	42.8	24.2
Czech Republic	10.8	10.5	45.6	33.1
Denmark	16.4	4.6	34.5	44.5
Germany	15.7	13.2	46.2	24.9
Estonia	7.9	9.4	45.4	37.3
Ireland	11.7	16.3	50.2	21.7
Greece	10.6	18.9	44.8	25.7
Spain	6.9	17.6	50.0	25.6
France	13.8	14.7	41.8	29.7
Italy	12.9	19.5	43.0	24.6
Cyprus	5.1	17.5	50.7	26.7
Latvia	7.9	9.8	43.5	38.8
Lithuania	7.7	12.4	45.7	34.2
Luxembourg	8.3	17.5	49.0	25.3
Hungary	13.7	14.7	44.5	27.2
Netherlands	14.0	16.2	56.7	13.0
Austria	12.4	13.2	49.2	25.2
Poland	12.1	20.3	45.6	22.0
Portugal	8.2	14.7	46.6	30.5
Slovenia	10.6	16.3	45.2	27.9
Slovakia	9.8	12.4	48.5	29.3
Finland	11.0	12.3	40.7	36.0
Sweden	7.1	8.6	42.7	41.5
UK	13.3	9.2	40.7	36.8
EU25	12.6	14.8	44.9	27.7

Source: EU-SILC 2007

Correspondingly, the proportion living in households with work intensity of 0.50 to 0.99 in the EU25 is increased from 33% to 44.5% and the proportion in households with work intensity of less than 0.5 but greater than 0 from just under 8% to almost 15%. (The proportion living in workless households, with work intensity of zero, is marginally higher on the new measure because of the slightly different treatment of those in education or training and the inclusion of a few people excluded from the variable in the EU-SILC.)

The difference between the two measures in this respect is summarised in Table 3. The difference is particularly large in countries where part-time working is most important – in the Netherlands, Germany and the UK – in the first of which the proportion of those aged 18-64 living in households with work intensity of 1 is reduced by 31 percentage points and in the other two by 27-28 percentage points. In each case, the reduction is accompanied by a much bigger increase for those living in households with work intensity of 0.50 to 0.99 than in those living in households with work intensity of less than 0.5. This is also the case in most other countries, though for some – Greece, Spain, Italy, Cyprus, Luxembourg and Poland – the counterpart increase is larger in the latter work intensity group. Even in these countries, where the reduction in the relative number of people living in households with work intensity of one is smallest, it still amounts to over 10 percentage points.

Table 3 Difference in distribution of those aged 18-64 by work intensity of household between new and existing measure, 2007

Percentage point difference, new-existing

	Working intensity			
	0.00	0.01-0.49	0.50-0.99	1.00
Belgium	-0.2	8.9	14.4	-23.2
Czech Republic	0.0	3.7	10.1	-13.8
Denmark	1.6	2.4	14.4	-18.4
Germany	0.9	8.5	17.9	-27.3
Estonia	0.1	4.5	10.0	-14.6
Ireland	-0.1	8.9	11.4	-20.2
Greece	1.5	6.4	2.2	-10.1
Spain	0.1	7.1	5.7	-12.9
France	0.4	7.6	12.0	-20.0
Italy	0.0	7.7	3.7	-11.4
Cyprus	0.0	10.1	7.2	-17.4
Latvia	0.3	3.8	7.0	-11.2
Lithuania	-0.2	4.8	13.3	-18.0
Luxembourg	0.0	12.0	9.6	-21.6
Hungary	0.1	4.9	6.2	-11.2
Netherlands	1.4	9.2	20.2	-30.8
Austria	0.2	5.9	11.8	-17.9
Poland	0.1	7.3	5.5	-12.9
Portugal	-0.1	5.4	7.8	-13.1
Slovenia	0.0	6.6	9.6	-16.2
Slovakia	0.2	5.5	12.9	-18.6
Finland	0.1	5.4	6.9	-12.4
Sweden	0.2	4.6	18.9	-23.8
UK	0.2	5.9	21.8	-27.9
EU25	0.4	7.1	12.0	-19.5

III. Work intensity by detailed grouping according to new measure

The breakdown of work intensity within the 0.50-0.99 group, which covers some 45% of those aged 18-64 in the EU25 as a whole and over 50% in a number of countries, shows a marked variation between countries. On average across the EU25, just under half the people in this group in 2007, 21% of the total, lived in households with work intensity of 0.8 or less but greater than 0.5 while the majority of the remainder – just over 14% of the total – lived in households with work intensity of 0.5, which in nearly all cases are couple households in which only one person, who worked full-time, was employed during the preceding year (Table 4).

In Greece and Italy, over 20% of all those in this age group lived in households with work intensity of 0.5, reflecting the relatively large number of households which still conform with the traditional male ‘bread-winner’ model, especially, as indicated below, households with children, where women look after these rather than being in paid employment. At the same time, there are only two countries – Sweden and the UK – where the proportion living in such households was less than 10% in 2007.

In both Greece and Italy, comparative few people (only around 5-6% of the total aged 18-64) lived in households where work intensity was greater than 0.8 but less than 1 – in

households, in other words, where in most cases one person worked full-time and the other worked more than half time. This, however, was also the case in most other countries, in only four cases, the proportion with work intensity in this group being over 12% in -Austria, marginally, the UK, Sweden and the Netherlands. While this was also the case in most other countries, in the Netherlands and Sweden, around 20% or more of those in this age group fell into this group.

Table 4 Distribution of those aged 18-64 by work intensity of household – detailed grouping on new measure, 2007

	% Total aged 18-64					
	Work intensity - new measure					
	0.00	0.01-0.49	0.50	0.51-0.80	0.81-0.99	1.00
Belgium	17.0	16.0	11.2	19.8	11.9	24.2
Czech Republic	10.8	10.5	18.6	21.1	5.9	33.1
Denmark	16.4	4.6	11.8	11.9	10.7	44.5
Germany	15.7	13.2	13.5	22.1	10.5	24.9
Estonia	7.9	9.4	14.6	22.5	8.3	37.3
Ireland	11.7	16.3	13.7	26.4	10.2	21.7
Greece	10.6	18.9	20.8	19.4	4.7	25.7
Spain	6.9	17.6	16.0	25.6	8.4	25.6
France	13.8	14.7	12.9	18.4	10.5	29.7
Italy	12.9	19.5	20.4	16.4	6.2	24.6
Cyprus	5.1	17.5	15.7	26.4	8.6	26.7
Latvia	7.9	9.8	13.3	23.8	6.4	38.8
Lithuania	7.7	12.4	12.5	26.9	6.3	34.2
Luxembourg	8.3	17.5	16.8	22.7	9.6	25.3
Hungary	13.7	14.7	16.2	21.9	6.4	27.2
Netherlands	14.0	16.2	10.0	25.7	21.1	13.0
Austria	12.4	13.2	13.7	23.3	12.1	25.2
Poland	12.1	20.3	15.2	23.5	6.9	22.0
Portugal	8.2	14.7	14.5	24.5	7.6	30.5
Slovenia	10.6	16.3	16.1	24.3	4.8	27.9
Slovakia	9.8	12.4	16.0	25.5	7.1	29.3
Finland	11.0	12.3	10.1	20.5	10.0	36.0
Sweden	7.1	8.6	8.2	16.3	18.2	41.5
UK	13.3	9.2	7.6	20.0	13.0	36.8
EU25	12.6	14.8	14.0	21.0	9.8	27.7

Source: EU-SILC 2007

In 15 of the 24 countries for which data are available, therefore, over 60% of those aged 18-64 lived in households where work intensity was less than 0.8 on the new measure and in half the countries, over 40% lived in households where work intensity was 0.5 or less. In Greece and Italy, over half lived in households with this level of work intensity.

Size of households by work intensity

There is a broad relationship between the work intensity of households and their size in terms of the number of people of working age living in them. Workless households, therefore, tend to a large extent to be those with only a single person of working age; those with work intensity of less than 0.5 but more than zero to be those with three or more people of working age, only one of whom in most cases is in employment; those with work intensity of 0.5 to be predominantly couple households with only one person in full-time work and the other not working; those with work intensity of more than 0.5 but less than 1 to be couple households or, to a slightly lesser extent those with three or more people of working age; and those with work intensity of 1, either single person or couple households (Table 5).

Table 5 Division of households by number of people of working age by work intensity, 2007

% Total households in each group

	Work intensity - new measure														
	0.00			0.01-0.49			0.50			0.51-0.99			1.00		
	Number of people of working age in household														
	1	2	3+	1	2	3+	1	2	3+	1	2	3+	1	2	3+
BE	67	29	4	18	35	47	2	88	10	15	58	27	54	44	2
CZ	67	28	4	10	28	62	1	87	12	6	33	61	35	54	11
DK	83	16	1	50	39	11	5	94	1	22	58	20	51	47	2
DE	77	21	2	28	35	37	2	94	4	19	55	26	65	33	3
EE	80	19	2	20	31	49	4	88	9	10	41	49	53	42	5
IE	65	30	5	24	32	44	1	93	6	13	47	40	42	53	5
GR	68	25	8	8	23	69	2	86	12	8	36	56	39	53	7
ES	61	29	10	7	22	70	1	88	11	8	41	51	38	56	6
FR	67	30	3	23	39	39	4	90	7	16	58	26	51	47	2
IT	61	30	10	5	20	75	1	89	10	11	41	48	56	40	4
CY	70	25	4	8	19	74	2	74	25	8	34	58	35	60	6
LV	80	18	2	14	28	59	1	91	8	8	34	57	44	44	12
LT	75	21	4	16	30	54	2	83	14	8	34	58	37	55	7
LU	66	30	4	8	21	71	1	90	9	13	59	28	53	45	1
HU	62	33	5	10	32	58	1	90	9	9	34	57	37	55	9
NL	79	19	2	24	45	31	3	94	3	18	66	16	67	32	1
AT	72	25	3	20	38	42	3	88	9	17	48	35	61	33	6
PL	62	30	7	9	25	66	2	80	18	9	32	59	35	59	5
PT	65	28	7	10	25	65	1	82	17	7	30	63	27	67	7
SI	60	33	7	5	13	82	1	66	34	6	19	75	30	62	8
SK	68	26	6	3	15	82	1	63	36	4	18	79	32	52	16
FI	82	17	1	43	44	13	6	92	2	18	61	21	49	50	1
SE	83	16	1	51	38	12	5	93	2	25	61	15	51	47	1
UK	61	17	22	25	29	46	1	91	8	14	50	35	42	40	19
EU25	69	25	7	18	30	52	2	89	9	14	49	37	49	44	6

Source; Eurostat, EU-SILC, 2007

Almost 70% of workless households in the EU25 as a whole in 2007 were therefore those with only one person of working age, the proportion exceeding 80% in the three Nordic countries and being 60% or above in all countries. Only in the UK, was the proportion of workless households with more than two people of working age larger than 10%. Here as well as in Spain, Italy, Poland and Slovenia, the probability of a household being workless if it contains more than one person of working age is greater than elsewhere.

Just half of households in the EU with work intensity of more than zero but less than 0.5 contained three or more people of working age, typically with only one person in full-time work and perhaps one of the others working part-time. The proportion exceeded 80% in Slovenia and Slovakia and was around 75% in Italy and Cyprus, while, by contrast, it was only around 11-13% in the three Nordic countries where households with more than two people of working age are uncommon and where a relatively large proportion of households with this level of work intensity are single person ones with the person concerned working, in most cases, for only part of the year.

Almost 90% of households in the EU25 with work intensity of 0.5 were couple households, nearly all of them with one person working full-time. Only in Cyprus and Slovenia did the proportion fall below 80% in 2007.

Around half of households in the EU25 with work intensity of above 0.5 but below 1 are couple households, in most cases with one person working full-time and the other part-time. In the EU10 countries together with Greece and Portugal, however, where part-time working is less developed and where household sizes tend to be bigger, a larger proportion contain three or more people of working age, in most cases with only two of them in employment. In Slovenia and Slovakia, the proportion was 75% or more in 2007 and in the Czech Republic and Portugal, over 60%.

A similar proportion of single-person and couple households at EU level make up those with work intensity of one, i.e. where everyone of working age is in full-time employment and apart from in the Czech Republic, Latvia, Slovakia and the UK, households with three or more people of working age account for only a very small proportion of the total. In Germany, Austria and the Netherlands, over 60% of the households with this level of work intensity were single-person ones in 2007, reflecting the relatively small proportion of couple household with both people working full-time (and in the Netherlands, the significant number of couple households with both people working part-time).

IV. Work intensity of people living in households with children

The presence of children in households has a marked effect on work intensity in many countries, though one which is far from being uniform. In all countries, a smaller proportion of people living in households with children (defining these to be all those under the age of 18) lived in workless households in 2007 (over 6 percentage points less on average across the EU as a whole than the overall proportion living in workless households). In many countries, however, this was accompanied by a smaller proportion living in households where everyone of working age was in employment (i.e. which had a work intensity of one). This was particularly the case in Germany, where only around 12% of those living in households with children lived in households with a work intensity of one, only just over half the proportion for the population as a whole), and in the Netherlands, where the proportion was under 6% (again only just over half for the population as a whole)¹. In the UK, the proportion living in such households was also much less in the case of those with children (over 8 percentage points less than for the population as a whole) even though it was much the same as the EU25 average (Table 6).

¹ The comparison here is between all those living in households someone is aged 18-64 and those living in such households with children. Note that whereas the earlier analysis was confined to those aged 18-64, here everyone is covered who lives in a household where there is at least one person aged 18-64.

Table 6 Distribution of people living in households with children (aged under 18) by work intensity on the new measure, 2007

% Total living in households with children

	Work intensity - new measure					
	0.00	0.01-0.49	0.50	0.51-0.80	0.81-0.99	1.00
Belgium	8.7	13.1	13.3	22.0	18.8	24.1
Czech Republic	6.6	8.9	25.0	21.4	6.1	32.0
Denmark	5.7	3.2	13.0	12.1	16.2	49.8
Germany	7.1	11.1	24.1	31.6	14.4	11.8
Estonia	3.0	9.5	18.9	22.3	9.1	37.3
Ireland	9.4	16.0	17.4	28.0	10.2	19.0
Greece	4.0	11.6	29.8	15.1	5.1	34.4
Spain	2.7	12.3	23.2	22.4	10.5	28.8
France	5.0	12.2	15.8	20.6	16.6	29.7
Italy	5.0	14.8	30.6	15.6	9.6	24.4
Cyprus	1.8	10.9	16.3	22.8	10.5	37.8
Latvia	3.7	8.4	15.3	25.8	5.7	41.2
Lithuania	3.9	10.3	13.0	25.6	6.1	41.1
Luxembourg	3.3	9.6	26.6	26.6	13.8	20.1
Hungary	6.5	14.4	22.0	22.2	6.3	28.5
Netherlands	4.2	12.9	15.1	36.6	25.4	5.8
Austria	4.1	12.0	21.3	29.3	15.0	18.2
Poland	4.4	17.0	18.8	22.7	8.2	29.0
Portugal	4.2	10.0	15.4	18.2	8.6	43.5
Slovenia	3.2	8.7	12.3	21.9	5.5	48.4
Slovakia	3.9	11.5	15.0	25.0	6.4	38.2
Finland	3.5	8.5	13.2	23.7	12.9	38.1
Sweden	3.5	5.1	8.9	14.7	24.2	43.6
UK	13.2	9.3	11.2	24.3	16.3	25.8
EU25	6.2	12.0	19.7	23.1	13.1	25.9

Source: EU-SILC 2007

On the other hand, in a number of countries, the proportion living in households with work intensity of one was larger in respect of those with children than for the overall population. This was particularly the case in Slovenia, where the proportion was over 14 percentage points larger, and Portugal, where it was over 9 percentage points larger.

At the same time, with the exception of Slovenia, a larger proportion of people lived in households with work intensity of 0.5 (in couple households where one person was in full-time work and the other not at all) if they had children. In Greece and Italy, in particular, the proportion amounted to around 30% in 2007 (around 8 percentage points more than for the population as a whole), reflecting the widespread tendency for women with children to stay at home to take care of them rather than to be in paid employment. In Luxembourg (27%), the Czech Republic (25%), Germany (24%) and Spain (23%), the proportion was less but still relatively large.

V. Work intensity of those at risk of poverty

A large majority of those at risk of poverty in all countries live in households where work intensity is either zero or low (0.5 or less). In 2007, around a third of people in the EU25 households with at least someone aged 18-64 lived in workless households, the proportion rising to over half in Belgium and Denmark and over 45% in Germany and Ireland (Table 7). Just over a quarter in the EU25 lived in households where at least someone of working age was in employment but work intensity was less than 0.5, the proportion exceeding 30% in

Italy, Lithuania, Hungary, Poland and Finland, while a further 18% lived in households where work intensity was 0.5. In the latter case, the proportion was over 20% in all four Southern EU15 Member States along with Cyprus and Luxembourg, the proportion being almost 29% in Italy.

Table 7 Distribution of those at risk of poverty by work intensity of households on new measure, 2007

% of those with income <60% of median living in households with members aged 18-64

	Work intensity - new measure					
	0.00	0.01-0.49	0.50	0.51-0.80	0.81-0.99	1.00
Belgium	55.3	23.0	10.0	6.1	1.2	4.4
Czech Republic	40.9	27.9	18.6	6.5	0.8	5.3
Denmark	54.0	9.0	12.0	7.0	2.4	15.6
Germany	47.8	19.8	10.5	11.7	2.5	7.7
Estonia	33.4	24.5	16.8	9.2	2.2	13.9
Ireland	48.2	28.3	9.8	8.9	0.5	4.3
Greece	17.3	29.3	23.8	12.7	4.9	11.9
Spain	19.1	27.6	26.8	13.4	2.7	10.3
France	33.9	29.3	14.5	12.2	3.0	7.1
Italy	28.4	30.2	28.5	6.3	1.5	5.0
Cyprus	24.9	26.2	22.3	10.2	4.0	12.4
Latvia	30.3	22.6	16.2	14.6	3.0	13.4
Lithuania	27.2	31.3	13.3	17.2	1.9	9.1
Luxembourg	16.3	22.8	26.4	18.7	3.9	11.8
Hungary	32.1	32.5	15.4	10.9	2.3	6.7
Netherlands	35.2	23.6	18.2	11.3	5.7	5.9
Austria	33.0	22.0	18.7	14.5	1.7	10.1
Poland	19.6	31.7	18.6	15.9	4.9	9.4
Portugal	25.0	27.7	22.3	12.0	3.4	9.6
Slovenia	37.2	25.7	17.5	8.7	2.4	8.4
Slovakia	29.3	29.7	16.2	12.1	1.4	11.3
Finland	34.7	30.9	9.8	12.0	2.9	9.7
Sweden	22.9	21.0	9.4	13.2	10.4	23.2
UK	43.4	20.3	10.2	12.0	5.4	8.7
EU25	33.4	26.0	17.8	11.4	3.2	8.2

Source: EU-SILC 2007

In these countries, therefore, a sizable proportion of those with income below the poverty threshold live in households where only one person of a couple is in full-time work and, where, accordingly, the traditional model of the man working and the woman not does not prevent the household from having a poverty-level of income.

In some countries, moreover, a significant proportion of those at risk of poverty live in households where everyone of working age is in full-time employment, where, therefore, the earnings from working full-time are not sufficient to keep income above the poverty threshold. This is the case, in particular, in Sweden, where 23% of those at risk of poverty lived in households with work intensity of one in 2007 (though the risk of poverty overall was relatively low – see below) and, to a lesser extent, in Denmark, where the proportion was just under 16% (and where the overall risk was also relatively small). In both countries, these relatively large proportions reflect not so much the low earnings of those in full-time employment but the relatively large numbers living in households where everyone of working age was in work (the largest proportions in the EU), coupled with the comparatively low risk of poverty among those living in households where work intensity was low because of the relatively generous level of income support from social transfers.

VI. Risk of poverty by work intensity of household

The risk of poverty varies markedly according to the work intensity of households, if, as throughout, households are confined to those containing someone of working age. In all Member States, with the partial exception of Greece, those living in workless households have the highest risk, according to data from the EU-SILC for 2007, though the proportion with income below the poverty threshold varies from around 70% in Estonia and Latvia and over 60% in Ireland to under 30% in Luxembourg, Hungary and the Netherlands (Table 8)

Table 8 Proportion of people at risk of poverty by work intensity of their household, 2007

	<i>% with income below 60% median</i>					
	Work intensity - new measure					
	0.00	0.01-0.49	0.5	0.51-0.80	0.80-0.99	1.0
Belgium	46.1	21.6	11.7	4.2	1.2	2.4
Czech Republic	34.8	28.5	9.2	3.3	1.3	1.6
Denmark	37.7	22.3	10.2	6.3	2.1	3.5
Germany	45.7	23.7	9.8	7.4	3.4	5.1
Estonia	68.7	44.9	18.1	7.3	4.6	6.0
Ireland	62.5	29.7	10.7	5.7	0.9	3.3
Greece	31.1	35.3	20.8	14.2	20.3	8.1
Spain	46.2	32.1	27.6	10.2	5.8	6.8
France	32.3	27.4	13.2	8.3	3.2	3.0
Italy	41.1	33.6	24.4	8.0	4.1	3.7
Cyprus	52.0	20.3	16.5	5.0	5.3	4.6
Latvia	71.7	45.9	22.5	11.9	9.5	6.2
Lithuania	56.6	46.6	18.1	11.7	5.3	4.2
Luxembourg	28.6	22.1	19.3	11.6	5.4	7.0
Hungary	29.5	29.2	11.0	6.7	4.8	3.0
Netherlands	27.6	15.8	15.8	4.0	2.6	5.2
Austria	31.2	19.9	13.4	6.9	1.5	4.7
Poland	32.0	32.0	21.5	13.4	13.0	7.1
Portugal	46.6	35.5	25.6	9.3	7.7	4.7
Slovenia	36.7	19.0	11.8	4.0	5.2	2.5
Slovakia	30.8	27.1	11.1	5.5	2.2	3.7
Finland	37.6	31.1	10.2	6.7	3.1	3.0
Sweden	33.5	28.9	11.6	8.9	5.4	5.6
UK	50.1	38.1	20.2	10.0	6.8	4.3
EU25	41.0	29.8	18.0	8.6	4.9	4.6

Note: The table is confined to those living in a household with someone aged 18-64

Source: EU-SILC 2007

Except in Greece and Poland, those living in a household with work intensity of greater than zero but less than 0.5, have a lower risk of poverty than those living in workless households, though the proportion with income below the poverty threshold is still above 15% in all countries and above 20% in all apart from the Netherlands, Austria and Slovenia. In the three Baltic States, the proportion exceeds 40% and in Greece, Portugal and the UK, over 35%.

In households with work intensity of 0.5, which are predominantly couple households with one person working full-time, the proportion at risk of poverty is generally smaller, though not in the Netherlands, but still over 10% in all countries apart from the Czech Republic and Germany – in both of which it is marginally below 10% - and over 20% in all four southern EU15 countries, where a significant proportion of households fall into this category, together with Latvia, Poland and the UK.

In all countries, the risk of poverty declines appreciably once work intensity exceeds 0.5 – which is why it is important to distinguish this level of work intensity from higher levels – on average by over 9 percentage points at the EU level. In most cases, the risk falls as work intensity increases, though this is not the case in Greece or Slovenia, where the risk was higher in 2007 among those with work intensity of over 0.8 but below 1 than among those with work intensity of 0.8 or below but above 0.5, reflecting the relatively few people falling into this category (less than 5% of the total in both cases – see Table 4 above). There was also not much difference in the risk of poverty between households with work intensity above 0.5 in Cyprus, while in number of countries, the risk was higher among those living in households with work intensity of 1 than among those in households with a slightly lower level of work intensity. In most of these cases, however, the relative number of people at risk was small, only around 6% or less, though around 7% in Spain and Luxembourg.

The relatively small difference in the risk of poverty among households with work intensity above 0.5 in many countries means that there is less of a case for distinguishing between these in terms of groupings than between those with work intensity of 0.5 and those with a higher level. Nevertheless, in most countries, the risk of poverty is less among households with work of over 0.8 than among those where work intensity is lower than this, though the proportion of people concerned is for the most part relatively small (10% or below for those with work intensity of 0.51 to 0.80 in all but 5 countries).

VII. Concluding remarks

The above analysis demonstrates the difference it makes to the measure of the work intensity of households if explicit account is taken of the extent of part-time working by household members as well as the months spent not in paid employment. The difference concerned clearly varies across countries with the importance of part-time employment, arguably giving a better indication of the earnings obtained from working and, therefore, of the potential risk of poverty faced by households with different characteristics so far as the employment status of household members is concerned. The analysis also indicates the additional insight into the employment characteristics of households provided by sub-dividing work intensity in a slightly more detailed way than the grouping of the variable in the EU-SILC database.