

# SOCIAL CONDITIONS

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Population and living conditions

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### **In-Work Poverty**

# New commonly agreed indicators at the EU level

The fact that being in employment is an effective way to secure oneself against the risk of poverty and social exclusion is clearly borne out by the evidence and has been recognized by the European Councils of Lisbon, Nice and Stockholm where Member States highlighted the importance of promoting participation in employment as a means of preventing and alleviating poverty and social exclusion. But Member States also recognised that holding a job is not always sufficient to escape poverty: a particular family structure, such as one with two or more dependants and only one earner, or low earnings, resulting from a range of labour market problems including recurrent unemployment, inability to find fulltime work and low wage rates, are at the origin of the problem of the so-called "in-work poverty". The new European employment guidelines established by the Council in 2003 refer explicitly to the need to reduce the number of working poor. The formal recognition of in-work poverty has led to the remit to define relevant indicator(s) and variables to be used in the context of both the Open Method of Coordination (OMC) in the field of social inclusion and the Employment Strategy (EES).

This Statistics in focus describes the indicators and variables that have been developed to measure in-work poverty at the EU level and reviews some of the available evidence, mainly with reference to the EU-15 Member States but also relating to the new Member States, for which partial data are available on a non-strictly comparable basis.

A significant minority of the employed population of the EU25, 7%, amounting to an estimated 14 million people, live in a household whose equivalised income is situated below the national poverty line. These in-work poor owe their status to a variety of labour market problems and/or to household circumstances.

In-work poverty is measured by assessing employment at the level of individuals, and can be usefully combined with information obtained by defining the labour market attachment of households and linking it with information on their income situation. The extent to which working-age household members are active in the labour market, combined with the presence of dependants, is a major determinant of the exposure to poverty risk of individuals. The advantages of combining both individual and household approaches are highlighted in the analysis.

# Measuring the overlap between work and poverty: combining individual and household approaches

Whether the overlap between employment and poverty should be viewed from the perspective of individuals or households is not only a definitional issue (see methodological notes) but involves a different policy focus. Indeed, both approaches have their merits and are complementary rather than mutually exclusive.

When focussing on individuals who are at work and are also poor, the main concern is to understand why their earnings are not sufficient to lift them and their households above the poverty threshold, with particular attention to labour market problems like low pay, precarious employment and inability to find full-time work. The household is taken into account insofar as it affects the individual risk of being in working poverty – and since poverty incidences are strongly influenced by household structures and household employment patterns, working poverty must be analysed not only through personal and occupational characteristics but also through household characteristics.

By adding a household approach, we look at the economic well-being of all the people, including children and other dependants, living in households where there is some work. Under the assumption of equal sharing of resources within households that underlies the definition of relative income poverty, the economic well-being of individuals depends on the sum of resources contributed by all the members of their households. For example, a female spouse who works part-time and relies on her husband's earnings as the main source of household income will probably not be on low (equivalised) income; similarly, a young person who has just entered the labour market with a low starting salary may still be living with his parents and enjoying relatively high living standards. On the other hand, a household in which only one adult works, even full-time and with average pay, may be at risk of poverty if there are three or more dependants. Hence, measuring employment at the level of households provides a better indicator of the welfare implications associated with labour market status than individual employment rates.

Furthermore, the household approach allows focussing on the forces that shape the labour supply decisions of households; from a policy perspective, it helps placing the emphasis on helping families and households become more self-reliant and reconciling income support with empowering people to participate as fully as possible to economic and social life.

# Being in employment is the best route out of poverty risk...

The common indicator of in-work poverty to be used in the context of the OMC on Social Inclusion and the EES defines the in-work poor as those individuals who are employed and whose household equivalised disposable income is below 60% of national median equivalised income. The employment status of individuals is measured on the basis of their "most frequent activity status", that is, the status they declare to have occupied

for more than half the total number of months for which information on any status is available during the income reference period. Where an individual provides information on his/her activity status over the 12 months of the year, the most frequent activity status will be the status he/she declares to have occupied for at least 7 months. It is important to note that this definition of in-work poverty is stricter in terms of months worked than the official US and French definitions, where the main criterion for being classified as in-work poor is to have been active for at least six months in the year and, in the case of the French definition, actually employed for just one month. Given the potential policy implications of using this indicator in comparisons across countries with very different labour market conditions, and particularly with different levels of unemployment, it was felt that this indicator should refer to populations that are as far as possible homogeneous.

The indicator of in-work poverty needs to be presented and analysed separately for wage and salary employees and the self-employed, so as to allow concentrating on population groups that are as homogeneous as possible, both in terms of potential problems faced and of policy solutions that can be applied to them. An additional key reason is that information on self-employment income is normally less reliable than information on wages and salaries.

Figure 1 presents the incidence of poverty risk in the EU15 as a whole for the different activity status groups. It shows that being in employment is by far the most effective way to secure oneself against the risk of poverty (see also Table 1a in the Statistical Annex): in 2001, only 7% of the employed population (and 6% of wage and salary employees) in the EU-15 had an income below the national poverty line, as against 38% of the unemployed and 25% of the other inactive.

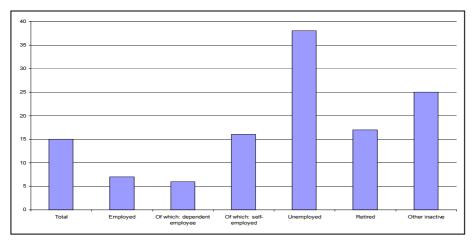


Figure 1: Incidence of poverty risk by most frequent activity status, EU-15, 2001 (%)

Source: Eurostat, ECHP UDB version December 2003. For Denmark and Sweden, national submissions based on the Law Model database and the Income Distribution Survey (HEK) respectively. Reference population: people aged more than 15 years.



Year-to-year movements in the rate of in-work poverty – i.e., a reduction or an increase in the number of the in-work poor – must be assessed jointly with movements in the overall at-risk-of-poverty rate or the poverty risk for complementary sub-groups of the population (the unemployed, the inactive, the retired). A re-distribution of the poverty risk to the advantage of those at work and at the expense of the unemployed and the inactive cannot be seen as a positive development.

It is therefore important to look at both the incidence and distribution of poverty risk by activity status.

## ... but the employed represent a large share of those at risk of poverty.

These measures may provide quite different pictures of the problem under examination: even if people in employment are less exposed to the risk of poverty than other status groups, they represent a large share of those at risk of poverty, since a large part of the adult population is at work. In the EU15, around a quarter of the people aged 16 years and over at risk of poverty are in employment; in Luxembourg, the Netherlands and Portugal this share is 40% or higher (Figure 2 and Table 2a in the Statistical Annex).

If survey information is used to extrapolate the number of in-work poor, around 11 million workers in EU15 countries appeared to be living in a household with an equivalised income below the national poverty threshold in 2001. Taking into account all household members living with the in-work poor, 20 million people were affected by in-work poverty, i.e. 6% of the total population and 36% of the population at poverty risk.

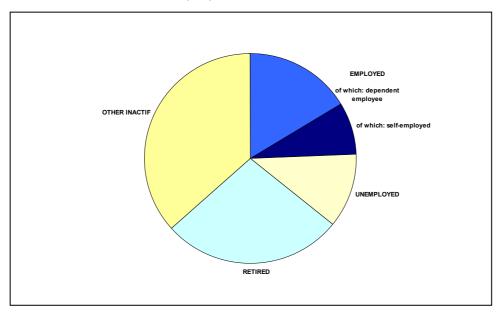


Figure 2: Distribution of poverty risk by most frequent activity status, EU-15, 2001 (%)

Source: Eurostat, ECHP UDB version December 2003. For Denmark and Sweden, national submissions based on the Law Model database and the Income Distribution Survey (HEK) respectively. Reference population: people aged more than 15 years.

## In-work poverty: lone parents or sole earners with children are particularly vulnerable

The in-work poor may owe their status to various labour market problems such as recurrent unemployment or unstable jobs, inability to find full time work or low wage rates, or to a particular household structure with, for example, only one working-age adult and two or more dependants. A number of explanatory variables, covering relevant personal. occupational and household characteristics, are therefore recommended for the examination of the phenomenon. In fact, some of these variables may only be relevant for dependent employment or self-employment. This is the case, for instance, for the variables type of contract or pay level, which are only applicable to wage and salary employees. Table 1 provides some evidence of the impact of variables that can be measured in a reliable

way from the ECHP. Low pay is obviously an important risk factor of in-work poverty (this variable was not included in the table due to low reliability of data on monthly wage and monthly time of work), but being low-skilled and remaining in unstable and often part-time employment, can also lead to poverty. The evidence shows self-employment as being another "risk factor" but as already stated above the reliability of income data for the self-employed is not guaranteed, given the potential problem of underreporting of income.

Depending on the country, the youngest workers (especially in Luxembourg, the Netherlands and in Finland) or the older ones (especially in Greece, Portugal, Italy and Ireland) face a relatively high risk of poverty. Even if women are more likely to occupy unstable, less paid or part-time jobs, they face



comparable or even lower risk of in-work poverty than men (especially in Italy and Ireland), most likely due to the fact that they are often second earners in the household. Indeed, the most important risk factors of in-work poverty relate to the household

situation of workers: clearly, lone parents or sole earners in households with children are particularly vulnerable to poverty risk. On average in the EU-15, at least one in five such workers are exposed to poverty.

Table 1: In-work poverty risk by main characteristics of the employed population, EU-15, 2001 (%)

	BE	DK	DE	EL	ES	FR	IE	IT	LU	$NL^1$	AT	PT	FIN	SE	UK	EU15
T-4-1	4	2	A	12	10	0	7	10	0	0	(	10	(	2	(	7
Total	4	3	4	13	10	8	7	10	8	8	6	12	6	3	6	7
Dependent employees	3	1	4	5	7	6	6	7	8	:	3	7	4	2	5	6
Self-employed workers	10	15	5	25	20	25	16	18	2	<u>:</u>	24	28	17	22	14	16
Women	4	2	-	12	8	7	Pers	sonal 6	charac 8	teristic 7	<b>s</b> 6	11	(	2	7	7
	4	2 3	6 4	13	8 10	7 9	9	13	8	8	6	13	6 5	3	7 6	8
Men	4	3	4	13	10	9	9	13	8	8	0	13	3	3	0	- 8
By age	0	7	1.0	12		1.0	2	0	1.0	20	_	10	1.5		1.1	10
16 to 24 years	8	7	10	13	6	10	2	9	16	20	5	10	15	6	11	10
25 to 54 years	4	2	4	11	10	8	7	10	8	7	6	11	5	3	6	7
55 years and over	5	3	5	21	10	8	13	14	5	3	8	21	7	2	7	9
By level of education <sup>2</sup>																
Low	6	4	9	23	16	11	12	16	16	8	8	16	8	4	10	12
Medium	5	2	4	9	6	6	6	5	5	:	5	3	7	3	7	5
High	2	1	2	1	3	3	3	5	1	6	7	1	3	2	4	3
							House	ehold	chara	cteristic	$cs^3$					
Living alone, no children	7	5	5	9	7	6	14	7	6	12	6	15	13	5	12	8
Living alone, 1 or more children	8	4	22	17*	29	16	15*	11	17*	30	11	30	6	6	22	19
Living with adults not at work, 0 child	5	2	6	16	7	13	7	11	8	8	8	11	3	4	8	9
Living with other adults not at work, 1+ children	10	2	10	20	26	26	27	33	16	13	12	36	6	10	17	20
Living with other adults some/all	10	2	10	20	20	20	21	33	10	13	12	30	O	10	1 /	20
at work 0 child	3	1	1	11	3	4	3	3	2	2	4	10	4	1	2	3
Living with other adults some/all																
at work 1+ children	2	3	3	10	7	5	3	6	9	6	5	10	4	1	4	5
				J	ob cha	aracte	ristics	of wa	ge and	l salary	empl	oyees	only			
By number of months worked <sup>4</sup>																
Less than full year	8	2	10	7	12	12	11	19	12	:	4	13	11	:	13	12
Full year	3	1	4	5	6	6	5	7	8	:	3	7	3	:	5	5
By number of weekly hours worked																
<= 30 hours	7	9	9	16	11	6	12	9	:	:	3	20	18	:	11	10
> 30 hours	3	1	3	5	6	5	4	7	8	:	3	6	3	<u>:</u>	3	5
By type of contract <sup>5</sup>																
Permanent contract	3	:	3	4	5	5	4	6	8	:	3	6	3	:	4	4
Temporary contract	7	:	8	10	9	9	8	18	7	:	3	12	8	:	8	10
* Small sample size or many missing observ		doto no			-	-									_	-

<sup>\*</sup> Small sample size or many missing observations; : data not available

Notes:

Source: Eurostat, ECHP UDB version December 2003. For Denmark and Sweden, national submissions based on the Law Model database and the Income Distribution Survey (HEK) respectively. Reference population: people aged more than 15 years and employed.



<sup>1)</sup> For the Netherlands, the data are compiled on the basis of the current activity status, since there is no calendar of activities in the national questionnaire. The variable "number of months worked", therefore, cannot be filled in.

<sup>2)</sup> Low = ISCED 0-2; Medium=ISCED 3; High= ISCED 4 and more.

<sup>3)</sup> Work for the other members of the household is defined in the same way as for the observation unit: that is, are considered workers only those who declare to have worked for more than half the total number of months for which they have been able to provide information on their activity status in the calendar year - i.e., normally, for at least 7 out of 12 months. Children are defined as dependent children, that is, individuals aged 0-15 and 16-24 if still inactive and living with at least one parent.

<sup>4) &</sup>quot;Full year" corresponds to work over the total number of months for which information on the activity status has been provided. "Less than full year" corresponds to work for more than half, but less than all, the number of months for which information on activity status is provided.

<sup>5) &</sup>quot;Temporary contract" includes "fixed-term or short-term contracts", "casual work with no contract" and "some other working arrangement".

## Poverty risks for workers and overall population: Common patterns?

Figure 3 presents the incidence of in-work poverty by country in the EU15 and contrasts it with the at-risk-of poverty rate for the total adult population (aged 16 years or more). In general, the in-work poverty risk varies with the total poverty risk, with Southern

countries facing high poverty risk for both the employed and the total population. There is, however, much variation in the patterns of association. In Denmark, Belgium, Ireland, Germany and United Kingdom, being at work reduces the risk of poverty by two thirds or more, whereas in the Netherlands and Luxembourg the employed have only a slightly lower chance of escaping poverty compared to the total adult population.

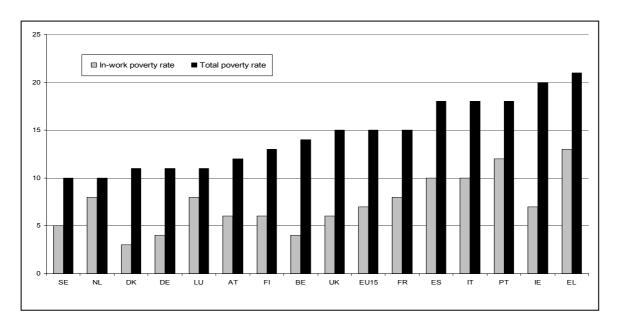


Figure 3: In-work poverty and total poverty risk rates, EU-15, 2001 (%)

Source: Eurostat, ECHP UDB version December 2003. For Denmark and Sweden, national submissions based on the Law Model database and the Income Distribution Survey (HEK) respectively. Reference population: (1) for total poverty rate: whole population; (2) for in-work poverty rate: people aged more than 15 years and employed.

To explain these differences, we need to look at the interaction of the following underlying patterns:

- The employment/non-employment share in the total adult population. The higher the employment share in a country, the more the poverty risk rate for the total population will be determined by the poverty risk of the employed population;
- The distribution of employment across households. The extent to which non-employed people share a dwelling with people at work or with other jobless individuals varies across countries. The work attachment of households has an important bearing on the income situation of its members: as will be shown in the next section, people living in jobless households have a far higher risk of low income, compared with those who live in households with some work. On the other hand, households where all working-age adults are at work will generally escape poverty;
- The incidence of poverty risk in each activity status group of the population. Such incidence is determined by various factors: the composition of the population in each activity status group, the characteristics of tax-benefit systems, the overall wage level in the economy and its dispersion. In particular, the higher the self-employment share in total employment, the higher the poverty risk for the total

employed population; similarly, the higher the share of unemployment (particularly long-term unemployment), the higher the incidence of poverty risk for the non-employed.

In Belgium, a low in-work poverty risk coexists with an intermediate rate of poverty risk for the total adult population. This can be explained by the high non-employment rate in this country, the fact that non-employment is often concentrated in the same households (high share of people living in jobless households) and the high incidence of poverty risk for jobless households. By contrast, in Luxembourg and the Netherlands, the employment share is relatively high and/or employment is distributed quite evenly across households. Hence, in these countries, the poverty risk rate for the employed population is not far below that for the total population.

In Ireland, the difference between the total poverty rate and the in-work poverty rate is mainly explained by the high incidence of poverty risk for the non-employed groups (54% for the unemployed, 39% for the retired and 33% for the other inactive) and their respective shares in the total adult population. As a consequence, in this country, more than one in three non-employed persons are at risk of poverty (as against 22% in the EU-15).



The poverty risk and the share of self-employed among workers also differ between countries. In Greece, selfemployed persons face a high risk of poverty (25%) and represent more than one third of the employed; the poverty risk for the whole employed population is thus well above the average for the EU15 (13% as against 7%). In Sweden and Denmark, the self-employed also face a high risk of poverty compared to dependent employees (24% versus 4% in Sweden and 15% versus 1% in Denmark), but this has only limited impact on total in-work poverty risk as the self employment share among workers remains low. By contrast, in Germany and Luxembourg the self-employed face comparable or even lower poverty risk than employees and represent a low share of the working poor population. In interpreting these results, one must keep in mind that self-employment earnings appear to be subject to much greater under-reporting in household income surveys than employee earnings, something that affects the reliability of results on income poverty risk for this group of the population. At the same time, it cannot be ignored that own-account workers (selfemployed workers without employees) tend to report poorer working conditions than employees, including long hours worked and lower pay.

#### Around 14 millions of working poor in EU-25...

Some evidence on in-work poverty is also available for the new Member States and the three Candidate countries Bulgaria, Romania and Turkey. Table 1abis in Annex presents the incidence of poverty risk by activity status. These data are based on national sources (mainly household budget surveys). Due to the absence of harmonised data sources for those countries. results cannot be considered comparable across countries, in spite of Eurostat's efforts to ensure maximum coherence with the definitions and concepts used for the EU-15 Member States.

The in-work poverty risk attains, on average, 9% in the new Member states (against 7% for the EU-15) and ranges from 3% in Czech Republic to 14% in Slovakia (for which data are still provisional). Added to the number of working poor in EU-15 (on a non-strictly comparable basis), this results in a total of 14 million inwork poor in the EU-25. In Candidate Countries, employed people face the highest poverty risk in Turkey (23%) and the lowest risk in Bulgaria (6%).

Even if the in-work poverty risk tends to vary with the total poverty risk, there is a non negligible variability in the ratio between the poverty risk of employed people and the risk encountered by the total population. This ranges from around 40% in Czech Republic, Cyprus,

Hungary, Malta, Slovenia and Bulgaria to 92% in Turkey and 71% in Poland. Like for EU-15 Member States, these differences are explained by the interaction of various factors.

Table2abis in annex presents the distribution of poverty risk by activity status in New Member States and Candidate Countries. In Slovenia, Malta, Hungary, Cyprus and the Czech Republic, the employed represent around 20% of the poor. This is mainly the result of a relatively low in-work poverty risk incidence and, for Malta and Hungary, a low employment share in the total population. At the opposite, in Lithuania and Slovakia, more than 40% of the poor appear to be at work.

## The at-risk poverty rate by work attachment of the household

The "work intensity" of the household is defined as the overall degree of work attachment of working-age members in a household; it is calculated by dividing the sum of all the months actually worked by the working age members of the household by the sum of the workable months in the household - i.e., the number of months spent in any activity status by working age members of the household (see methodological appendix). Households are classified bγ composition (presence of dependant children or not) as well as by their work intensity (WI). For households with dependent children, four categories of WI are defined, whereas only three are used for households with no dependent children. WI=0 corresponds to jobless households; WI=1 to full-year work for all working age adults in the household; and 0<WI<1 corresponds to either less than full-year work for some or all members of the household or only some of the adults in the household being at work. Due to lack of information on the activity status of individuals throughout the income reference year in the national databases used, no work intensity figures could be calculated for the new Member States and Candidate Countries.

People living in jobless households (WI = 0) are clearly at higher risk of poverty than non-employed people. Table 2- panel A shows that, on average in the EU-15, the poverty risk rate for people in such households was as high as 63% in the presence of dependent children and 30% in the absence of dependent children. At the other extreme, only 5% of individuals living in households where all working age adults are working full-year, are at poverty risk (whether there are children or not). People living in households with intermediate levels of work intensity face intermediate risks of poverty.



Table 2: Incidence and distribution of poverty risk of the household members by the work intensity of their households, EU-15, 2001 (%)

						A.	Incid	ence								
	BE	DK	DE	EL	ES	FR	IE	IT	LU	NL	AT	PT	FI	SE	UK	EU15
				Ho	usehol	ds wit	h no d	epende	nt chi	ldren						
WI = 0	26	22	26	39	37	28	69	34	15	:	23	39	24	:	29	30
0 < WI < 1	7	6	6	15	8	11	5	13	6	:	8	9	14	:	10	10
WI = 1	3	0	4	10	3	6	5	4	4	:	5	9	7	:	4	5
				H	ouseh	olds w	ith dep	enden	t child	ren						
WI = 0	73	33	55	31	67	69	82	64*	58	:	33	75	51	:	72	63
0 < WI < 0.5	36	11	33	38	41	43	39	51	38	:	22	64	14	:	36	40
$0.5 \le WI \le 1$	7	2	12	20	20	22	16	26	18	:	10	23	4	:	14	17
WI =1	3	0	4	9	5	6	4	4	9	:	8	14	5	:	8	5
			J	B. Dist	ributio	n of th	e total	refer	ence po	opulat	ion					
				Но	usehol	ds wit	h no de	epende	nt chil	ldren						
WI = 0	9	:	9	8	5	6	4	10	8	:	6	4	7	:	6	7
0 < WI < 1	13	:	20	22	24	16	13	23	24	:	16	18	16	:	15	19
WI = 1	15	:	15	10	9	14	12	11	18	:	18	14	19	:	24	17
				H	ouseh	olds w	ith dep	enden	t child	ren						
WI = 0	5	:	2	2	3	2	5	2	1	:	2	1	1	:	7	2
0 < WI < 0.5	2	:	4	4	9	4	8	6	6	:	3	4	4	:	4	5
$0.5 \le WI \le 1$	19	:	19	30	37	24	39	28	30	:	29	26	27	:	21	26
WI =1	37	:	25	22	14	34	19	20	13	:	24	33	26	:	24	25
	100	:	100	100	100	100	100	100	100	:	100	100	100	:	100	100
			(	C. Dist	ributio	n of th	ie pooi	refer	ence p	opulat	tion					
						ds wit	_		_	_						
WI = 0	22	28	22	17	11	12	15	17	9	:	15	8	20	:	12	16
0 < WI < 1	9	21	13	19	10	12	4	16	11	:	13	9	25	:	10	13
WI =1	4	6	8	6	2	6	3	2	5	:	9	7	16	:	7	6
				H	ouseh	olds w	ith dep	enden	t child	ren						
WI = 0	33	3	9	4	10	9	23	7	6	:	7	5	8	:	31	13
0 < WI < 0.5	8	28	15	9	21	11	17	16	18	:	8	13	6	:	9	14
$0.5 \le WI \le 1$	13	7	23	33	42	36	34	38	42	:	29	33	12	:	19	29
WI =1	10	6	10	11	4	14	4	4	9	:	20	24	14	:	12	10
	100	100	100	100	100	100	100	100	100	:	100	100	100	:	100	100

Source: Eurostat, ECHP UDB version December 2003. For Denmark, national submissions based on the Law Model database. No data available for NL and SE. Reference population: People living in households with a least one working age adult and not composed solely of students.

Table 2 – panel C shows the distribution of individuals at risk of poverty by the work intensity of their households, resulting from the interplay of the results shown in panel A and B. Individuals living in jobless households are over-represented among the poor. In Belgium and the United Kingdom, around one in three individuals at risk of poverty live in

jobless households with dependent children due to the high share of jobless households. Still, there remains a significant minority of the poor – 10% for the EU15 and as many as 24% in Portugal – who live in households where all the working age members are at work.

The individual and household approaches to examining in-work poverty can be reconciled by exploring the work intensity of households where the in-work poor live. Table 3 shows that in the majority of EU15 Member States, around 50% of the in-work poor live in households with less than full work attachment (0<WI<1). In Spain and Italy this proportion attains more than 80% and in Ireland and Luxembourg it is 70%. In the EU15 as a whole, as many as 37% of the in-work poor live in a household where all working-age adults are employed. This can be explained by the extent of part-

time employment, low pay or by the presence of dependants in the household.

The full understanding of in-work poverty obviously requires a more in-depth analysis of household structures and households' labour force patterns, as well as of the balance of different income sources within households. In particular, it would be important to explore the situation of non-employed household members. This could be taken up in a next step of the analysis.

Table 3: Distribution of the poor employed working-age people by the work intensity of households, EU-15, 2001 (%)

	BE	DK	DE	EL	ES	FR	IE	IT	LU	NL	AT	PT	FI	SE	UK	EU15
				Н	ouseho	olds wi	th no e	depend	lent ch	ildren	ı					
0 < WI < 1	19	:	18	27	14	16	9	24	17	:	16	12	25	:	24	19
WI = 1	24	:	30	16	7	18	19	8	15	:	25	17	39	:	25	20
WI = 1 24 : 30 16 7 18 19 8 15 : 25 17 39 : 25 20 Households with dependent children																
0< WI < 1	28	:	35	39	70	41	64	59	53	:	31	40	15	:	31	44
WI =1	29	:	17	18	9	24	8	9	14	:	28	31	22	:	21	17
	100		100	100	100	100	100	100	100		100	100	100		100	100

Source: Eurostat, ECHP UDB version December 2003. No data available for DK, NL and SE. Reference population: Poor employed working-age adults.

#### **Conclusions**

The present article discusses the possible approaches to measure the overlap between work and poverty and describes the methodological choices that have been retained at the level of the EU to define common indicators and variables to measure this overlap. It reviews the available evidence, mainly relating to the 15 old EU Member States (on the basis of the ECHP) but also for the new Member States, for which data are available on

a non-strictly comparable basis. By adopting a common indicator of in-work poverty, Member States have finally acknowledged the importance of the problem of in-work poverty and are prepared to measure the extent to which participation in employment is not sufficient to escape income poverty. This certainly represents progress in the policy debate about the fight against poverty, where inactivity and in particular unemployment have long been the predominant labour market-related factors used to explain poverty.



#### Statistical appendix

Table 1a: At-risk-of-poverty rate by most frequent activity status and by gender, EU-15, 2001 (%)

																	. /
		BE	DK	DE	EL	ES	FR	ΙE	IT	LU	NL	AT	PT	FI	SE	UK	EU15
	Total	4	3	4	13	10	8	7	10	8	8	6	12	6	5	6	7
	F	4	2	6	12	8	7	4	6	8	7	6	11	6	4	7	7
Employed	M	4	3	4	13	10	9	9	13	8	8	6	13	5	5	6	8
Of which:	Total	3	1	4	5	7	6	6	7	8	:	3	7	4	4	5	6
dependent	F	4	2	5	5	5	5	4	4	8	:	3	4	5	4	6	5
employees	M	3	1	4	5	7	7	7	10	8	:	3	9	3	3	4	6
Of which:	Total	10	15	5	25	20	25	16	18	2	:	24	28	17	24	14	16
Self-	F	8	15	6	26	20	26	12	13	0*	:	23	32	20	24	15	16
employed	M	11	15	4	25	21	24	17	19	3	:	25	24	15	25	14	16
	Total	22	22	16	28	24	22	35	24	13	13	19	27	21	19	28	22
Non	F	22	21	16	27	24	23	35	25	13	13	21	27	23	20	29	23
employed	M	21	24	17	29	24	20	36	23	13	13	15	28	17	16	25	21
	Total	32	23	34	39	37	30	54	51	48*	23	23	38	21	19	49	38
Of which:	F	27	17	26	32	30	26	34*	46	:	24	23*	30	17	13	34	30
Unemployed	M	40	32	41	46	45	34	61	54	54*	18	22*	49	26	24	59	44
	Total	21	23	13	32	18	17	39	13	8	3	16	25	20	16	24	17
Of which:	F	20	24	14	35	10	18	52	13	8	0*	19	26	26	20	27	17
Retired	M	22	23	12	29	22	16	35	14	7	4	13	25	11	10	20	16
Of which:	Total	21	22	18	23	24	26	33	28	16	12	22	28	22	22	30	25
Of which: Other	F	24	21	18	24	25	26	34	29	14	11	22	27	20	22	30	25
inactive	M	13	22	18	20	20	25	29	24	23	14	20	29	25	22	27	23

<sup>\*</sup> Small sample size or many missing observations; : data non available or too missing observations. Source: Eurostat, ECHP UDB version December 2003. For Denmark and Sweden, national submissions based on the Law Model database and the Income Distribution Survey (HEK) respectively. Reference population: people aged more than 15 years.

Table 1abis: At-risk-of-poverty rate by most frequent activity status and by gender, New Member States and Candidate Countries, 2002 (%)

		CZ	EE	CY	LV	LT	HU	MT	PL	SL	SK	NMS10	BG	RO	TR	CC3
	Total	3	9	6	10	13	4	6	12	4	14	9	6	14	23	21
Employed	F	3	10	5	10	12	5	2	10	3	15	9	:	13	25	22
	M	3	8	6	10	13	4	7	13	4	14	10	:	15	21	20
Of Which	Total	2	9	6	9	8	4	:	8	3	14	7	6	4	21	16
Dependent Employee	F	3	10	5	9	8	3	:	6	3	14	6	6	3	19	14
	M	1	8	6	8	8	5	:	10	4	13	8	5	4	21	16
Of Which	Total	7	13	8	22	34	5	:	20	7	24	17	6	25	24	23
Self-employed	F	6	12	5	23	36	5	:	21	8	26	17	9	25	28	26
The state of the s	M	7	14	8	21	33	4	:	20	7	24	16	5	26	22	21
	Total	11	27	30	21	20	13	:	18	17	26	17	:	19	21	21
Non Employed	F	12	27	30	20	20	13	:	17	19	25	17	:	20	22	21
	M	11	27	30	24	19	13	:	19	16	28	18	:	18	21	20
Of Which	Total	36	48	22	45	38	34	52	38	38	47	38	31	33	32	32
Unemployed	F	34	47	12	43	34	28	33	36	38	45	36	29	26	23	24
T P J	M	39	50	31	46	41	39	58	39	39	49	40	32	37	38	37
Of Which	Total	4	21	50	13	13	9	18	8	15	11	9	12	14	7	9
Retired	F	5	23	53	14	16	10	18	8	17	12	10	16	16	1	6
	M	2	15	46	9	7	8	19	7	12	9	8	7	12	9	9
Of Which	Total	13	28	16	23	18	14	18	20	16	29	19	16	22	23	22
Other Inactive	F	15	27	18	22	19	14	19	20	17	28	19	16	24	22	22
	M	11	30	12	24	16	14	11	21	15	29	19	16	16	24	22
	Total	8	18	15	16	17	10	15	17	10	21	15	13	18	25	23
Total Poverty rate	F	9	20	17	16	17	10	15	16	11	21	15	15	18	25	22
	M	7	17	14	16	16	9	15	17	9	21	15	12	18	25	23

<sup>:</sup> data non available or too missing observations. Source: National data bases. Reference population: people aged more than 15 years.



Table 2a: Distribution of the adult population (aged more than 15 years) at risk of poverty by gender and most frequent activity status, EU-15, 2001 (%)

		BE	DK	DE	EL	ES	FR	IE	IT	LU	NL	AT	PT	FI	SE	UK	EU15
	Total	15	13	24	27	24	29	19	25	41	46	27	40	25	29	24	26
	F	7	5	12	9	7	11	5	5	16	18	12	16	13	13	12	11
Employed	M	8	7	12	18	17	18	15	19	25	29	16	24	12	15	12	16
Of which:	Total	11	6	21	6	13	20	13	13	41	:	12	17	16	21	18	16
dependent	F	6	3	11	2	4	8	4	3	16	:	6	5	10	11	10	7
employees	M	5	3	10	4	9	12	9	10	24	:	7	12	6	10	7	9
Of which:	Total	5	6	3	21	11	9	7	11	1	:	15	23	9	8	6	8
Self-	F	1	2	1	7	3	3	1	2	0	:	6	11	4	2	2	2
employed	M	3	5	2	14	8	6	6	9	1	:	9	12	6	6	4	5
	Total	84	87	75	73	76	71	81	76	59	54	73	60	75	71	76	74
Non	F	54	49	46	47	49	45	52	50	38	36	53	37	50	44	51	47
employed	M	32	38	30	26	27	26	28	26	20	19	20	23	26	27	25	26
	Total	11	14	14	7	12	8	9	17	4	10	3	6	9	4	6	11
Of which:	F	6	7	5	3	5	4	2	7	2	9	1	3	4	2	2	5
Unemployed	M	6	8	10	4	7	4	7	10	2	2	2	3	5	3	4	6
	Total	37	40	36	34	12	29	16	17	15	1	28	24	41	32	33	27
Of which:	F	18	24	22	16	2	16	5	8	7	0	16	14	32	24	21	15
Retired	M	20	16	14	18	10	13	11	9	8	1	12	10	10	8	12	12
Of which:	Total	36	33	25	32	52	34	56	42	40	43	42	30	25	35	37	36
Of which: Other	F	30	19	19	28	42	25	45	35	29	27	36	20	14	19	28	27
inactive	M	6	14	6	4	10	9	10	7	10	16	6	10	11	16	9	8

<sup>:</sup> data non available or too missing observations. Source: Eurostat, ECHP UDB version December 2003. For Denmark and Sweden, national submissions based on the Law Model database and the Income Distribution Survey (HEK) respectively.

Table 2abis: Distribution of the adult population (aged more than 15 years) at risk of poverty by gender and most frequent activity status, New Member States and Candidate Countries, 2002 (%)

		CZ	EE	CY	LV	LT	HU	MT	PL	SL	SK	NMS10	BG	RO	TR	CC3
	Total	22	26	20	32	43	21	20	37	18	42	32	:	40	55	51
	F	19	24	14	29	37	15	4	30	12	37	26	:	31	37	36
Employed	M	28	29	28	35	51	29	38	44	27	47	39	:	51	75	69
Of which:	Total	14	24	16	25	22	18	19	18	14	36	19	:	:	24	:
dependent	F	15	23	13	24	21	12	4	13	10	33	15	:	:	8	:
employees	M	12	25	20	26	25	24	38	23	19	39	23	:	:	41	:
Of which:	Total	8	3	3	7	21	4	0	19	5	6	13	:	:	31	:
Self-	F	3	1	1	5	17	2	0	17	3	4	11	:	:	29	:
employed	M	16	5	7	9	26	5	1	21	7	8	16	:	:	34	:
	Total	78	74	80	68	57	79	81	63	82	58	68	:	60	45	49
Non	F	81	76	86	71	63	85	96	70	88	63	74	:	69	63	64
employed	M	72	71	72	65	49	71	62	56	73	53	61	:	49	25	31
	Total	32	21	3	25	19	16	14	22	14	26	22	:	14	4	7
Of which:	F	26	15	1	18	14	11	4	20	11	22	19	:	8	2	4
Unemployed	M	41	29	6	34	24	22	25	24	18	30	27	:	21	7	10
	Total	13	31	53	21	16	33	22	12	41	11	17	:	25	2	7
Of which:	F	18	39	53	29	24	39	16	15	47	16	21	:	31	0	7
Retired	M	5	19	54	11	6	27	29	9	31	5	12	:	20	4	8
Of which:	Total	32	22	24	22	23	30	45	29	28	22	29	:	20	39	35
Other	F	37	22	32	25	25	36	77	36	30	26	34	:	30	60	53
inactive	M	25	22	13	19	19	22	7	23	25	18	22	:	9	14	13

<sup>:</sup> data non available or too missing observations. Source: National databases.



#### >> ESSENTIAL INFORMATION - METHODOLOGICAL NOTES

For EU-15 Member States, figures presented in this publication come from the European Community Household Panel (ECHP) users' database, version of December 2003, except for Denmark and Sweden (national submissions based on the Law Model database and the Income Distribution Survey (HEK) respectively). The ECHP is a panel survey based on a standardised questionnaire that involves annual interviewing of a representative panel of households and individuals, covering a wide range of topics: income (including the various social benefits), health, education, housing, demographics and employment characteristics. It was developed by Eurostat (the statistical office of the European Communities) in association with Member States as of 1994. Further information on the characteristics of the survey and availability of data issued from it can be found at the following address:

http://forum.europa.eu.int/irc/dsis/echpanel/info/data/information.html. The ECHP is to be replaced by the EU Statistics on Income and living conditions (EU-SILC), which is expected to become the reference source for statistics on income and living conditions, and for the social inclusion commonly agreed indicator in particular (EU SILC is based on the European Parliament and Council Regulation (EC) N°1177/2003 of 13 June 2003). For the Netherlands, the data are compiled on the basis of the current activity status, since there is no calendar of activities in the national questionnaire. As a consequence, it is not possible to measure the work intensity of households and no distinction can be made between wage and salary employees and self-employed workers.

For New member States and Candidate Countries, national databases are used. Due to the absence of a common data source for those countries, indicators for New Member States and Candidate Countries cannot be considered to be fully comparable among them nor with EU15 ones, in spite of the fact that every effort has been made to ensure maximum comparability between the definitions and concepts used in the different New Member States and Candidate Countries and at the EU15 countries. Due to the lack of a calendar of activities, the activity status closest to the income reference period was used (either self-declared or ILO) and no work intensity figures could be provided. Although 2002 is currently the reference year for most of the countries, there are some exceptions due to the periodic nature of the data source in the countries concerned (i.e. Malta (2000), Czech Republic, Cyprus and Slovakia (2003)). Discussions are ongoing with the Slovak Institute of Statistics concerning the quality of the data used. Indicators for the Slovak Republic have therefore to be considered as provisional. The EU-15, EU-25 and NMS10 averages are calculated as a population-weighted average of the available national values.

The at-risk-of poverty rate adopted at the European Laeken Council (which endorsed an initial set of 18 indicators of social exclusion and poverty in December 2001) is measured as the share of persons with an equivalised disposable income below the at-risk-of-poverty threshold. The threshold is set at 60% of the national median equivalised disposable income. Equivalised income is defined as the household's total income divided by its "equivalent size", to take account of the size and composition of the household, and is attributed to each household member (the total household income is divided by its equivalent size using the so-called "modified OECD" equivalence scale. This scale gives a weight of 1.0 to the first adult, 0.5 to any other household member aged 14 and over and 0.3 to each child.).

When measuring the overlap between work and poverty, there is a series of conceptual difficulties arising from the fact that the statistical units and reference periods normally used to describe work, on the one hand, and poverty, on the other, differ. Notably, while employment status and labour market attachment are normally measured at the level of individuals, the measure of relative monetary takes account of the total resources of the households to which individuals belong. The two measures can be reconciled together through either equivalisation of household income that allows taking an individual approach of **in-work poverty**, or by measuring labour market attachment at the level of households in a **work intensity** measure.

The **in-work poor** are defined as those individuals who are classified as employed (according to their most frequent activity status) and whose household equivalised disposable income is below 60% of national median equivalised income. In order to cross-classify information on household income with information on the labour market status of individuals, both variables must refer to the same recording period. As information on income in the ECHP is annual and refers to the calendar year before the interview, the status is therefore based on information from the calendar of activities in the year preceding the survey, which is based on self-assessment rather that the ILO definition of activity status. The most frequent activity status is defined as the status that individuals declare to have occupied for more than half the total number of months for which information on any status is available in the calendar of activities.

In order to link information on the work attachment of households with information on income, the former must be defined with reference to the calendar of activity status during the year before the survey, as has been done for the individual-based indicator. **The work intensity of the household** has therefore been calculated by dividing the sum of all the months actually worked by the working age members of the household by the sum of the workable months in the household – i.e., the number of months spent in any activity status by working age members of the household. Only households with at least one working age person are included in the calculations. Households composed solely of students are excluded. A working age person is defined as a person aged 16-64 years, not being a dependent child (dependent children are individuals aged 0 to 15 years or 16 to 24 years if inactive and living with at least one parent).

Households are classified by their composition (presence of dependant children or not) as well as by their work intensity. For households with dependent children, four categories of WI are defined, whereas only three are used for household with no dependent children. WI=0 corresponds to the notion of jobless households; WI=1 corresponds to full-year work for all working age adults in the household; 0<WI<1 corresponds to either less than full-year work for all members of the household or only some of the adults in the household being at work.

It is worth mentioning that the ECHP does not allow to distinguish between full-time and part-time work in the calendar of activity status, but its successor, EU-SILC, includes such distinction (on a self-reported basis). It will therefore be possible to define work intensity taking account of hours as well as months worked.



### Further information:

#### Databases

EUROSTAT Website/Population and social conditions/Living conditions and welfare/Income and living conditions

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