Developing and learning from measures of social inclusion in the European Union[1]

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This paper describes the main concepts and broader measures of social inclusion used by the European Commission and European Union (EU) countries in the context of the *Social Open Method of Coordination (OMC)*. The main aim of the paper is to bring out the value of going beyond purely income-based measures of poverty to include other dimensions, which is what the indicators adopted for monitoring the Social OMC are intended to achieve. For this purpose, we draw on the *Community Statistics on Income and Living Conditions (EU-SILC)* and the EU *Labor Force Surveys (LFS)*, which provide data on most of these indicators on a comparable basis across EU Member States. Some general lessons, unresolved issues and priority areas for development are also explored or highlighted. It is of particular relevance to United States (US) debates that these unresolved issues include the balance to be struck between using standards that are fixed versus varying across time or countries. The core message, though, is that a multidimensional set of indicators can do justice to the complexity of the concepts involved in a much better way than can be achieved through considering only income-based measures.

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1. Setting the scene

Since 2000, EU countries and the European Commission cooperate in the field of social policy on the basis of the so-called *Open Method of Coordination (OMC)*. The OMC has significantly developed over time and now covers EU cooperation in three main policy areas or "strands": social inclusion (formally launched at the March 2000 Lisbon European Council[2]), pensions (since 2001) and health care and long-term care (since 2004). It also includes information exchanges in the field of *making work pay*. Since 2006, the three social "processes" that were progressively implemented under the OMC (one process for each main strand) have been *streamlined* into one integrated "Social OMC" built around 12 commonly agreed EU objectives (three for each main strand as well as three "overarching" objectives which address horizontal issues that cut across them[3]).

Concerns about poverty and social exclusion in the EU are far from new. Back in 1975 the European Communities adopted the first European Action Program to combat poverty.[4] Under Jacques Delors, the social dimension received more attention, based on a foundation of scientific research on poverty. The Final Report on the Second Program, taking expenditure rather than income as the indicator of resources, included the estimate for 1985 of 50 million poor people in the twelve Member States (see O'Higgins and Jenkins, 1990), based on the study carried out by Hagenaars, de Vos and Zaidi (1994).

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[2] The European Council, which brings together the EU Heads of State and Government and the President of the European Commission, defines the general political guidelines of the EU. The decisions taken at the European Council meetings (or "Summits") are summarized in "Presidency Conclusions" available from the website of the EU Council of Ministers: http://www.consilium.europa.eu/showPage.aspx?id=1&lang=en. All Presidency websites can also be found at this address. Since the March 2000 Lisbon Summit, the European Council holds every spring a meeting that is more particularly devoted to economic and social questions – the "Spring European Council".

[3] The 12 EU objectives for the *streamlined* Social OMC were adopted by the EU in March 2006: see http://ec.europa.eu/employment_social/spsi/docs/social_inclusion/2006/objectives_en.pdf.

The "overarching objectives" of the Social OMC provide linkage across the three social policy strands as well as between the EU social, economic and employment strategies. For instance, the third overarching objective is "to promote good governance, transparency and the involvement of stakeholders in the design, implementation and monitoring of policy".

[4] See *inter alia* Marlier et al. (2007) for a short review of the EU *Poverty* programs.

At the same time, the underlying concepts were increasingly debated (see, for example, Room, 1995; Silver, 1995; Nolan and Whelan, 1996). What is the meaning of the phrase "poverty and social exclusion", now widely used throughout the EU? In what sense is "social inclusion" the opposite of "social exclusion"? Do we mean "poverty" or "risk of poverty"? These issues go to the heart of societal objectives, and are not yet fully resolved. Moreover, the debate has been widened by the 2004 and 2007 EU Enlargements[5]. To what extent, for example, are notions like "social inclusion" and "social cohesion" differently interpreted in "new" EU countries that previously had communist regimes? We cannot provide here an extensive discussion, but there are certain essential elements that form the historical conceptual context in which the indicators adopted by the EU for monitoring the Social OMC (hereafter: commonly agreed indicators) have been developed:

- The long-standing *social inclusion* objective of the EU is concerned that all EU citizens participate in the benefits of economic integration and economic growth. The EU cannot be successful if significant groups are left behind as prosperity increases.
- The definition of *poverty* has therefore been based on the notion of *participation.* The EU Council of Ministers in 1975 defined the poor as "individuals or families whose resources are so small as to exclude them from the minimum acceptable way of life of the Member State in which they live", with "resources" being defined as "goods, cash income plus services from public and private sources" (EU Council of Ministers, 1975). In this sense, it is a *relative* definition, and the primary frame of reference is the country in which one lives – a point which is highly significant when we come to the indicators adopted.
- The move to "poverty and social exclusion" reflected a growing acceptance that *deprivation* is a multi-dimensional concept, and that, while financial poverty remains a major preoccupation, our concerns have to be broader. The European Commission, in its 1992 submission on "Intensifying the Fight Against Social Exclusion", argued that the term "social exclusion" is more encompassing than the term "poverty". It suggested that social exclusion captures more adequately the "multi-dimensional nature of the

[5] As a result of the 2004 Enlargement, the EU grew from 15 to 25 Member States. The 10 new EU countries were Cyprus, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovenia and Slovakia. In 2007 (the most recent Enlargement), Bulgaria and Romania joined. For a list of all 27 EU Member States as well as their official abbreviations, see Annex 1.

mechanisms whereby individuals and groups are excluded from taking part in the social exchanges, from the component practices and rights of social integration" (European Commission, 1992, page 8).

- With this broader focus came an emphasis on *dynamics*. People are excluded not just because they are currently without a job or income, but also because they have little prospects for the future or for their children's future. "When poverty predominantly occurs in long spells [...] the poor have virtually no chance of escaping from poverty and, therefore, little allegiance to the wider community" (Walker, 1995, page 103). Just as poorer Member States aspire to converge to the EU average, poorer EU citizens aspire to better individual prospects.
- The concept of exclusion introduces the element of *agency*[6]. When René Lenoir coined the phrase "les exclus" in 1974, he was concerned with those who were excluded from the French welfare state. In all countries, the design of social protection and the way in which it is administered exclude certain citizens. The State is a major actor, but it is not the only actor.
- Recognition of the limitations of an income measure has led to the EU adopting in 2001 the term "at risk of poverty" to denote people living in households with incomes below a specified threshold, indicating that persons living in households with incomes below the poverty line are not necessarily living "in poverty".

We briefly describe in Section 2 the set of indicators adopted to monitor progress in the Social OMC, in particular those aimed at capturing the multi-dimensionality of social inclusion. Drawing on the most recent data from EU-SILC and EU Labor Force Surveys (the two EU statistical sources for most of the indicators used by the EU for monitoring the Social OMC; see Annex 2), Sections 3 and 4 then bring out the value of an analysis of the social situation that draws on various dimensions covered by these commonly agreed indicators, compared with one that would only look at income-based measures of poverty and inequality. In Section 3, our focus is on the overlaps and complementarities of individual indicators, while in Section 4 we consider the portfolio of commonly agreed indicators as a whole (i.e. the relationships between them).

[6] The notion of agency has been examined by Sen (1985 and 1992) in his work on social justice.

2. Portfolio of indicators adopted by the EU for monitoring the Social OMC: major progress made in multi-dimensional coverage of social inclusion

Social indicators are of course used for a variety of purposes at national and international level, but in the Social OMC they have to serve very specific functions – namely, to facilitate comparison of actual performances achieved by EU countries through their national (and sub-national) social policies, and hence improve mutual learning and exchange of good practice across Member States. As emphasized by Atkinson, Cantillon, Marlier and Nolan (2002) in their independent study on EU indicators for social inclusion commissioned by Belgium during its Presidency of the EU in 2001, for indicators to be fit for purpose their construction needs to follow a *principle-based approach.* A specific *methodological framework* is therefore required for developing the indicators that are needed for the Social OMC. The "Report on indicators in the field of poverty and social exclusion" (Social Protection Committee, 2001), prepared by the Indicators Sub-Group of the Social Protection Committee (SPC)[7] and adopted by the Laeken European Council in December 2001, set out methodological principles for the construction of the commonly agreed social inclusion indicators, and proposed the so-called *Laeken indicators*.[8] The approach followed since the adoption in 2006 of an integrated monitoring framework for the Social OMC is very close to the one endorsed in 2001.

The commonly agreed indicators are now organized according to the structure of the common objectives for the Social OMC: one set of indicators and "context information" appropriate to the overarching objectives agreed for the Social OMC as a whole and one appropriate to each of the three social strands covered by the Social OMC (see Box 1), i.e. four portfolios in total. [9] The

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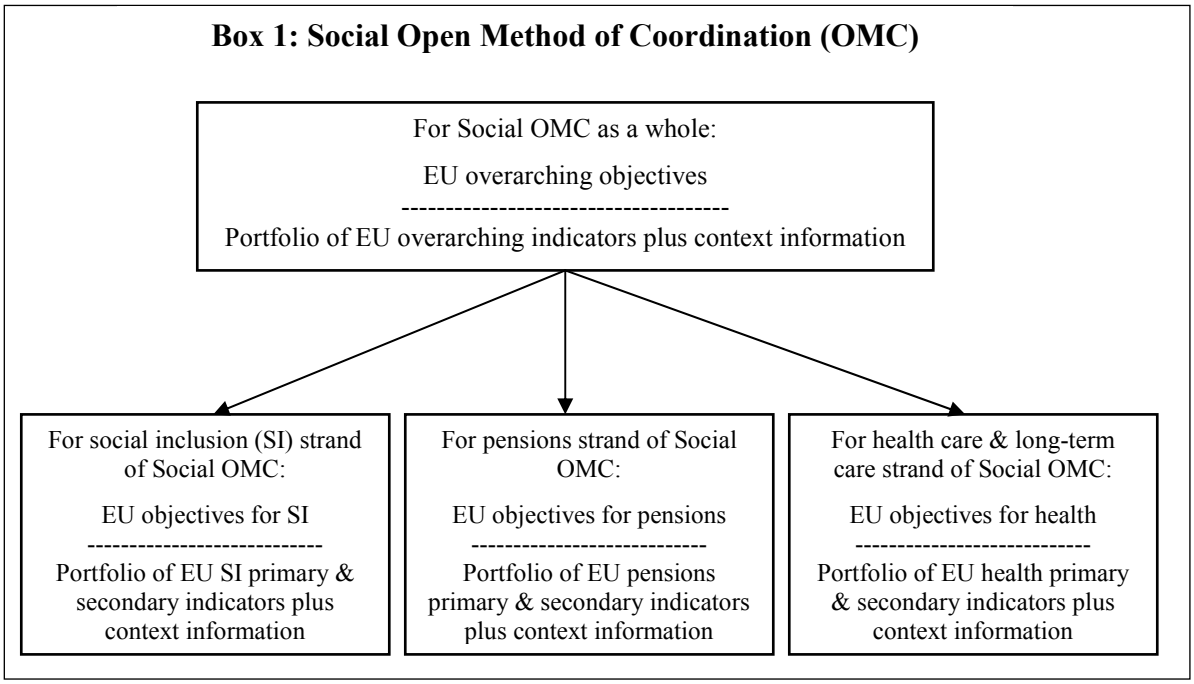
[7] The Social Protection Committee is comprised of high-level officials from the relevant ministries in each Member State and reports to the EU Ministers in charge of social policy.

[8] The methodological principles adopted in Laeken were consistent with those put forward in the aforementioned study by Atkinson et al. carried out on behalf of the EU Belgian Presidency, where they were originally proposed. Readers interested in a detailed discussion of these principles and, more broadly, of comparative EU indicators for social inclusion can refer to this study, which was subsequently published (see Atkinson et al., 2002).

[9] The most recent list of indicators that have been commonly agreed by the EU for monitoring the Social OMC was adopted by the EU Social Protection Committee in the second half of 2009. This list includes therefore four portfolios of indicators and context information: one for the Social OMC as a whole (overarching portfolio) and one for each of the three social strands (social inclusion, pensions and health portfolios). For each indicator, it provides

focus is for the most part on social outcomes rather than the means by which they are achieved, but to facilitate mutual learning these are supplemented with information (input indicators and context information) that allows a linkage between policies and social outcomes.

Box 1: Social Open Method of Coordination (OMC)



The methodological framework for the selection of commonly agreed indicators adopted in 2006 specifies that:

- Individual indicators should a) have a clear accepted normative interpretation; b) be robust and statistically validated; c) be measurable in a sufficiently comparable way across EU countries; d) be timely and susceptible to revision; and e) be responsive to policy interventions but not subject to manipulation. (It should be mentioned that the 2006 framework allows for the adoption of "commonly agreed *national* indicators". These are based on commonly agreed definitions and assumptions but, contrary to the "commonly agreed *EU* indicators", they do not satisfactorily fulfill all the criteria for the selection of EU indicators (especially the comparability and/or normative value

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the agreed definition and socio-demographics breakdowns. It can be downloaded from: http://ec.europa.eu/employment_social/spsi/common_indicators_en.htm.

requirements). This flexibility has allowed some indicators to be included which were seen as covering important social dimensions but for which no "robust" EU indicators could be built – for instance, because of lack of comparable data, diverging concepts used in the different Member States, etc.)

- Each of the four portfolios should be comprehensive and cover all key dimensions of the common objectives, be balanced across the different dimensions, and enable a synthetic and transparent assessment of a country's situation in relation to the common objectives. A direct consequence of this is that the EU portfolio of social inclusion indicators should cover not only income but also all the other important dimensions of social exclusion.

As shown in Tables 1a and 1b, the social inclusion portfolio now comprises twelve *Primary Indicators*, six *Secondary Indicators* and 13 *Context Information* statistics:

a) The *Primary Indicators* (see Table 1a) provide a "synthetic set of lead indicators" covering all key dimensions of the commonly agreed EU objectives and/or highlighting the social situation of key sub-populations. In the social inclusion area, they encompass Income poverty *risk* (Indicators P1-P3), Unemployment and Joblessness (P4 and P5), Low educational qualifications (P6), Employment situation of migrants (P7), Material deprivation (P8) and Access to healthcare (P10). They also include indicators that are currently being developed, relating to Housing and Child well-being (P9[10] and P11 respectively). A gender breakdown of each of the Primary Indicators for social inclusion and a breakdown of most by broad age groups are provided; for some indicators, other breakdowns are also given.

b) The *Secondary Indicators* (see Table 1b) support the lead indicators by describing in greater detail the nature of the problem or by describing other important dimensions of the phenomena. In the case of social inclusion, they provide the following: Poverty risk by different breakdowns and for alternative thresholds (S1), Persons with low educational attainment and Low reading literacy performance of pupils (S2 and S3), Depth of deprivation (S4) and Housing (S5 and S6).

[10] The current EU social inclusion portfolio (as agreed by the EU in the second half of 2009) includes two secondary indicators and two "context information" statistics. Further methodological work as well as further improvement of the data will be needed before one or more Primary Indicator(s) can be added to the portfolio.

c) In addition, a further set of twelve statistics has been specified for the social inclusion portfolio as providing *Context Information* (see Table 1b) to help in interpreting the Primary and Secondary Indicators: Income inequality, Regional cohesion, Life expectancy, Income poverty, Population in jobless households, In-work poverty risk, Making work pay (traps), Adequacy of social assistance, Health and Housing.

Table 1a: EU social inclusion portfolio - Commonly agreed Primary Indicators[11]

Income poverty:	P1) At-risk-of-poverty rate, which is calculated with a threshold set at 60% of the national equivalised median income and which has to be analyzed together with the actual value of the threshold in Purchasing Power Standards for two illustrative household types (a single-person household and a household consisting of two adults and two children) *P2) Persistent at-risk-of-poverty rate (indicator not yet available for all EU countries)* P3) Relative median poverty risk gap
Unemployment and Joblessness:	P4) Long-term unemployment rate (at least 12 months of unemployment on the ILO definition) P5) Population living in jobless households (distinguishing between adults aged 18-59 and children under 18)
Low educational qualifications:	P6) Early school leavers not in education or training (aged 18-24)
Employment situation of immigrants:	P7) Employment gap of immigrants (to be supplemented with relevant national data covering other key aspects of the social inclusion of immigrants)
Material deprivation:	P8) Population living in materially deprived households
Housing:	*P9) Indicator(s) to be developed; work in progress*
Access to healthcare:	P10) Self-reported unmet need for medical care (to be analyzed together with healthcare utilization)
Child well-being:	*P11) Indicator(s) to be developed; work in progress*

[11] Indicators P7 and P10 are commonly agreed *national* indicators (see above). Without the option of agreeing national rather than EU indicators, the only measure covering the situation of migrants and the only measure addressing the issue of access to healthcare could not have been included in the EU framework.

Table 1b: EU social inclusion portfolio - Commonly agreed Secondary Indicators and Context Information

Commonly agreed Secondary Indicators	
Income poverty:	S1) Poverty risk by different breakdowns (household types, work intensity of household, most frequent activity status, accommodation tenure status) and Poverty risk according to different at-risk-of-poverty thresholds (40%, 50% and 70% of the national equivalised median income)
Low educational attainment:	S2) Persons with low educational attainment S3) Low reading literacy performance of pupils aged 15
Material deprivation:	S4) Depth of material deprivation
Housing:	S5) Persons in households with high housing costs (more than 40% of their total disposable household income) S6) Persons living in overcrowded households
Commonly agreed Context Information	
Income inequality:	Income quintile ratio (S80/S20) and Gini coefficient
Regional cohesion:	Dispersion of regional employment rates
Life expectancy:	Healthy Life expectancy and Life expectancy at birth and at 65 (by Socio-Economic Status when available)
Income poverty:	At-risk-of-poverty rate anchored at a moment in time and At-risk-of-poverty rate before social cash transfers (other than pensions)
Jobless households:	Persons living in jobless households (by main household types)
In-work poverty risk:	In-work poverty risk (for full-time/part time workers)
Making work pay:	Unemployment trap, inactivity trap, low-wage trap
Adequacy of social assistance:	Net income of social assistance recipients as a % of the at-risk-of-poverty threshold for 3 jobless household types
Health:	Self-reported limitations in daily activities (by income quintiles, sex and age)
Housing:	Population living in households facing housing deprivation (i.e. poor housing conditions) and Housing costs share (median share of housing costs in total disposable household income for both total population and population at risk of poverty)

The choice of indicators is necessarily constrained by the availability of reliable and comparable data, and it was unsurprising that the original set of social inclusion indicators adopted in 2001 relied heavily on information about income and labor force status, where comparative data were already relatively well developed. The set of indicators that is now being

employed covers more dimensions, and when the indicators still under development are complete the portfolio will be truly multi-dimensional in scope.

As a result of both the availability of EU-SILC data and the growing urgency of addressing those key issues in view of the economic and financial crisis, significant progress has been made in 2009 on commonly agreed indicators on material deprivation and on housing (see Tables 1a and 1b). There have also been significant advances in the area of child well-being with the adoption of the EU Report on "Child poverty and well-being in the EU" in January 2008 by the European Commission and all 27 Member States[12]. However, the slot foreseen in Table 1a for one or more "child well-being" indicator(s) still needs to be filled in.

Despite the important progress made recently, significant challenges remain in improving the EU monitoring framework of the Social OMC, as we briefly discuss in our concluding Section. We now move on to an examination of how some of the currently available indicators can be used to investigate some key relationships between various income and non-income dimensions of social inclusion.

3. The EU social inclusion portfolio of indicators in practice: overlaps and complementarities

In this Section we examine the various dimensions covered in the EU social inclusion portfolio of indicators and try to assess, in particular, how far they differ with regard to the relative performance of different EU countries. Do the same countries perform well on all indicators, or do they all have their own special domain(s) where they stand out? Here the country is generally the unit of analysis (sole exceptions are Figure 5c and Table 3) rather than the individual person or household, which has some important implications as we shall see. We consider the indicators in pairs and explore how they can be used to "tell a story" about differences across Member States, about the impact of Enlargement, and about the relation between different dimensions of poverty and social exclusion. Clearly, a comprehensive account and understanding of the complex phenomena at stake would require a differentiated examination of the causes of poverty and social exclusion, based on a detailed and multi-dimensional analysis of the underlying micro-data on households and individuals, and drawing on a variety of sources and the extensive

[12] See: http://ec.europa.eu/employment_social/spsi/docs/social_inclusion/2008/child_poverty_en.pdf.

research literature available for individual countries. Such a (very valuable) enterprise is well beyond the scope of the present paper. Instead, by deliberately limiting our analysis to these aggregate indicators (which are available from the web; see Annex 2), our aim is to bring out their potential and also the limits to such an analysis. The expectation is of course not that countries would rely solely on these indicators in monitoring, analyzing and reporting on poverty and social exclusion; rather, it is that the national indicators they develop and use for these purposes, together with in-depth multi-dimensional analysis of the underlying micro-data, should be *linked back* to the common indicators as far as possible, in order to facilitate mutual learning between the different Member States. So, what we want to show through a number of examples is the value of considering not only income-based measures but also indicators covering other dimensions of social exclusion.

Our main focus is on the EU set of Primary Indicators with two important exceptions. For housing, we use the two EU agreed Secondary Indicators (S5 and S6 in Table 1b) because housing is an important dimension of social inclusion and is (currently) not covered in the primary set. And in our analysis of the Primary Indicator on material deprivation, we also look at indicator S4 to address the depth of deprivation.

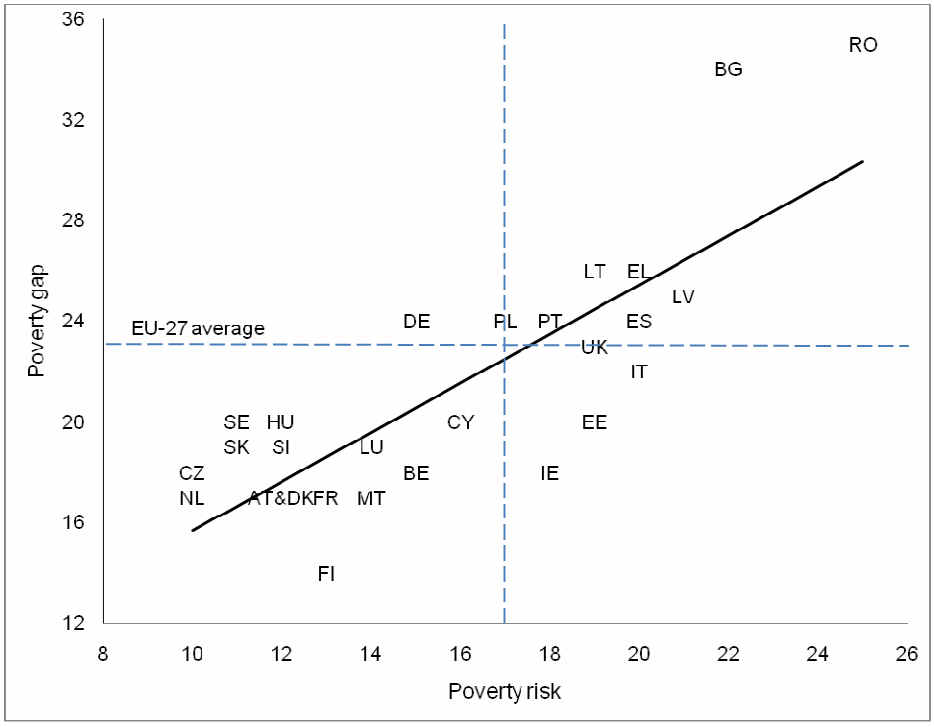
Income poverty

The portfolio of indicators contains three Primary Indicators on income poverty: the at-risk-of-poverty rate (the headcount; see definition in Table 1a), the persistent at-risk-of-poverty rate (the proportion of persons being at risk of poverty in the current year, and also in at least two of the three previous years) and the relative median poverty risk gap (which measures how far the median at-risk-of-poverty person is below the poverty risk threshold). Unfortunately, results for the persistent poverty risk are not yet available from EU-SILC for most Member States as they require four years of observations; they are therefore not analyzed here. Crucially, the income poverty threshold employed is explicitly and designedly relative to median income in the country in question, not in the EU as a whole. This is consistent with the core definition of poverty adopted by the Council and already quoted above, which refers to the minimum acceptable way of life in one's own country.

In Figure 1a, we plot the at-risk-of-poverty rate against the relative median poverty risk gap. These two indicators are clearly related (explored below in Table 6), but there are some

interesting outliers. For example, Ireland combines a relatively high poverty risk headcount with a fairly low median poverty risk gap while the reverse is true for Germany. Romania and Bulgaria combine the highest poverty risks with the highest poverty gaps. Moreover, their poverty gaps are much larger than what could be predicted by the regression line. By contrast, another striking outlier is Finland, where the poverty risk gap is much smaller than in any other EU country and the poverty risk is significantly lower than the EU average but not among the lowest ones (8 Member States have lower at-risk-of-poverty rates). It is likely that the level of the poverty risk threshold with respect to minimum social benefits, as well as the coverage of these benefits, is part of the explanation for these outliers.

Figure 1a: Relative median poverty risk gap and Poverty risk for EU countries, %, EU-SILC, 2007[13]



Note 1: EU-27 averages are population weighted averages of the 27 national rates (see Annex 1)

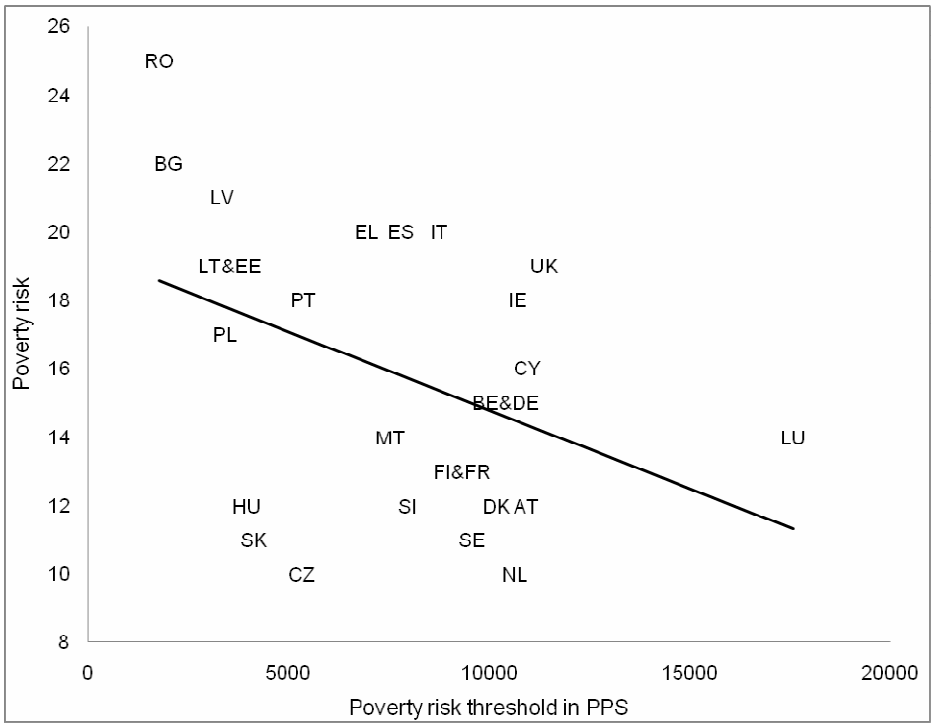
Note 2: The regression line is fitted by ordinary least squares to EU-27 countries

Note 3: For poverty gap, data are provisional for PT

[13] Countries' abbreviations are provided in Annex 1. For a detailed description of the data sources used for the Figures and Tables presented in the paper, see Annex 2.

The variation of at-risk-of-poverty rates across countries merits closer attention. It is interesting to observe that the 2004 Enlargement has not appreciably increased the range of rates of poverty risk, which vary between 10% (for the Czech Republic and The Netherlands) and 20-21% (Italy, Greece, Spain and Latvia). By contrast, the most recent EU Enlargement (in 2007) did broaden the range significantly: the poverty risk in Bulgaria is 22% and in Romania 25%.

Figure 1b: Poverty risk rate (%) and Poverty risk threshold (in PPS) for EU countries, EU-SILC, 2007



Note1: The regression line is fitted by ordinary least squares to EU-27 countries

Note 2: The national thresholds presented are annual amounts and apply to one-person households

Figure 1b plots the poverty risk rates against the poverty risk thresholds[14], which are the national reference incomes below which one is considered at risk of poverty and which are determined by the overall living standards in the country (being a proportion of national median incomes). It is clear from this Figure that there is a tendency for the poverty risk to fall as we move from poorer countries to richer countries. There is however substantial dispersion around the linear regression line fitted to predict poverty risk for the EU-27 Member States as a function of their national poverty risk threshold (and the R^2 is only 0.17[15]). All but one of the 12 EU countries lying below the regression line are among those with the most equal income distributions. Indeed, according to the 2007 EU-SILC data, 10 of these countries have Gini coefficients between 23% and 26% and one (The Netherlands) a Gini of 28%; only Poland has a Gini just above the EU-27 average (32% vs. 31%). The only other countries with a Gini below 30% are Belgium (26%) and Luxembourg (27%); Belgium lies almost on the line whereas Luxembourg is clearly an outlier. Bulgaria and Romania are distinctive in having very low thresholds and very high at-risk-of-poverty rates compared with other EU countries; they are also distinctive in having a very high Gini (35% for Bulgaria and 38% for Romania).

Thus, whereas the 2004 Enlargement did not really increase the difference in the at-risk-of-poverty rates between the best performers and the worst (2 to 1 for EU-15 vs. 2.1 to 1 for EU-25), the 2007 Enlargement did increased this difference (to 2.5 to 1). The at-risk-of-poverty rates

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[14] National thresholds are expressed in Purchasing Power Standards (PPS), which – on the basis of Purchasing Power Parities (PPP) – convert amounts expressed in a national currency to an artificial common currency that equalizes the purchasing power of different national currencies (including those countries that share a common currency). The national thresholds in Figure 1b are for a one-person household (see also Table 2a). For other type of households, the corresponding thresholds can easily be obtained by multiplying the thresholds provided by the "equivalised size" (see Annex 1) of the household. In Denmark, for instance, the threshold for a one-person household is 10,175 PPS; it is then (2.1*10,175) = 21,367 for a household consisting of two adults and two children aged under 14.

[15] R^2 provides the share of the variance predicted by the "model" in the total variance and thus gives an indication of how well the model performs in predicting the observed outcomes. In the case of a simple linear regression (as presented in this paper), R^2 is the square of the Pearson correlation coefficient. In view of the small number of observations, this measure of "goodness of fit" should be interpreted cautiously. Table 6 below presents the correlations between various indicators reviewed in this paper – for instance, for poverty risk x poverty gap the correlation is as high as 0.81.

clearly have to be interpreted in the light of the thresholds in each country; these are intended to capture exclusion vis-à-vis what is viewed as acceptable in the country, but the differences between them also help to convey the differences in real living standard involved. (See also the Section on material deprivation below.)

Long-term unemployment and joblessness

The concern about long-term unemployment, defined as the proportion of people unemployed (International Labor Organization definition) for at least 12 months in the total active population aged 15 years or more, is not a recent one and has been further exacerbated by the global financial and economic crisis. A second very important EU indicator of possible labor market exclusion is provided by the proportion of adults aged between 18 and 59 who live in *jobless households*, i.e. in households where all members aged 18-59 are either economically inactive or unemployed.[16] Living in jobless households is seen as particularly problematic, not only because of the generally precarious income situation of those households, but also because children growing up in such households may find it more difficult to find their place on the labor market in later life.

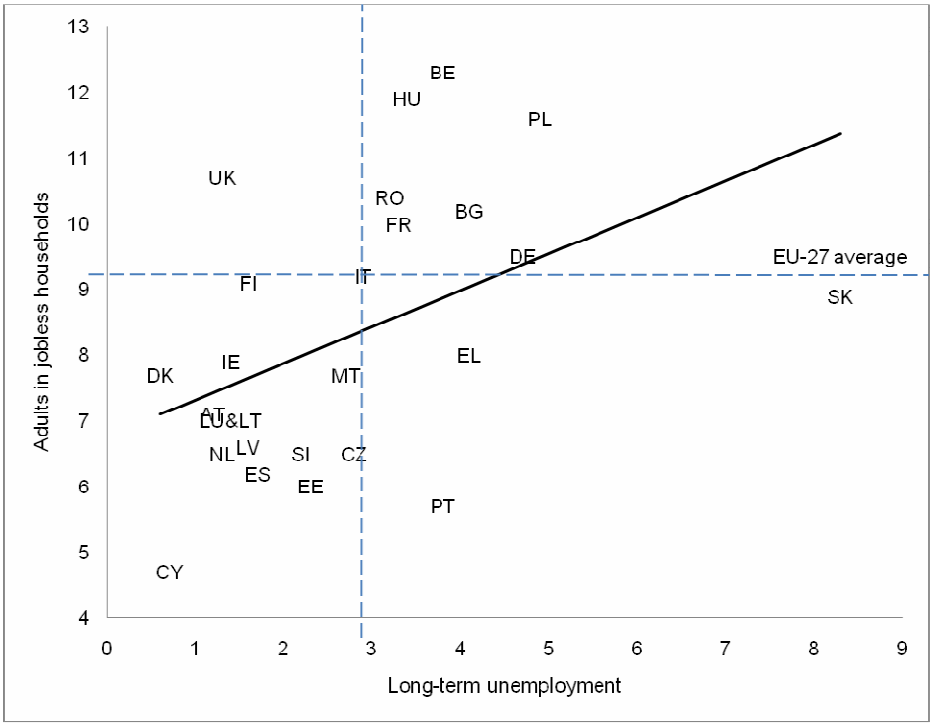
Figure 2 shows that the link between long-term unemployment and the proportion of adults in jobless households is positive but not very pronounced. One observes a (rather mixed) group of countries where the rates of both long-term unemployment and jobless households are low (with Cyprus in the extreme bottom left corner), and a group where both are high. The latter group includes some countries with Bismarckian welfare states (Belgium, France and Germany), and also some Eastern European countries (Bulgaria, Hungary, Poland and Romania). Portugal suffers from fairly high rates of long-term unemployment, without this resulting in many adults living in jobless households. Conversely, in the UK many adults live in jobless households, though long-term unemployment is low. Slovakia combines a very high long-term unemployment rate (8.3% as opposed to 3% for the EU-27 average) with a just below average level of joblessness (8.9% vs. 9.3%).

Three reasons are likely to account for this lack of a clear picture. First, persons may be out of work for other reasons than unemployment (caring responsibilities, disability…). Secondly,

[16] Households consisting solely of students are excluded from this indicator.

and more importantly, the extent to which unemployment is translated into joblessness at the household level depends on who the unemployed are and also on how unemployment is spread/ polarized among households (and is possibly related to household formation). In many Southern European countries, unemployed young adults often continue to live with their parents. Conversely, for single persons and single parents, unemployment by definition means living in a jobless household, so if there is a large proportion of such persons in a country, the proportion of jobless persons is more likely to be elevated.

Figure 2: Long-term unemployment and Adults in jobless households for EU countries, %, LFS, 2007



Note related to "Jobless households": 2006 data for DK, data missing for SE

Note 1: The regression line is fitted by ordinary least squares to EU-27 countries

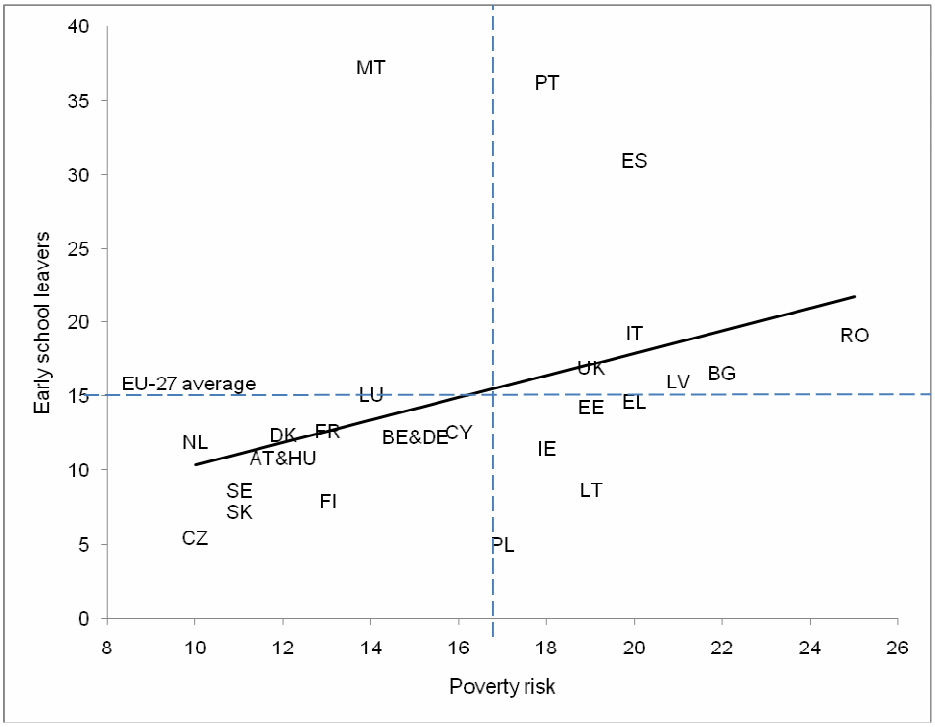
Note 2: AT and LU are clustered

Early school leaving

The *Early school leavers* indicator, i.e. the share of persons aged 18-24 who have only lower secondary education and have not received education or training in the previous four weeks, receives considerable attention at EU level both in the Social OMC and in the *European*

Employment Strategy. It does not only include drop-outs but also persons who have finished lower secondary education with a proper diploma and who may have then entered the labor market; the upper age limit of compulsory schooling can therefore be one of the determinants of the differences across countries. Although many Member States have taken measures aimed at tackling early school leaving[17], with an EU-27 average of 15.2% in 2007 (identical to that in 2006) it seems very unlikely that the Lisbon target of 10% in 2010 will be reached. Figure 3 shows that the three best-performing countries on this indicator are in Eastern Europe (Poland, Czech Republic, Slovakia) and Finland; it is in Malta, Portugal and Spain that the poorest outcomes are registered.

Figure 3: Early school leavers (LFS) and Poverty risk (EU-SILC) for EU countries, %, 2007



Note related to "Early school leavers": 2006 for Czech Republic; missing ("uncertain/unreliable") data for SI
Note related to the regression line: The regression line is fitted by ordinary least squares to EU-27 countries

[17] See, for instance, the "Joint Report on Social Protection and Social Inclusion 2009" and the "Joint Employment Report 2008/2009" (EU Council of Ministers, 2008 and 2009).

If we disregard the three outliers in Figure 3 (Malta, Portugal and Spain), we see a tendency for countries with higher poverty risk rates to also have higher levels of early school leaving.[18] Moreover, for similar poverty risk rates "old" Member States tend to have higher rates of early school leaving (for instance: the Czech Republic compared to the Netherlands or Lithuania and Estonia compared to the UK).

Employment gap of immigrants

The employment gap of immigrants measures the difference between the employment rate of immigrants and that of the non-immigrant population, where immigrants are defined as persons born abroad.[19] Figure 4 reveals first of all that the employment gap is negative in many countries (negative values are located in Eastern and Southern Europe and also in Luxembourg), indicating that immigrants are in fact more likely to be employed than non-immigrants. Clearly, the composition of the immigrant population in terms of age, country of origin and year of immigration is an important factor here. Although employment is a crucial aspect of people's income and living conditions, the description of this indicator rightly notes that it needs to be supplemented by relevant national data covering other key aspects of the social inclusion of migrants (European Commission, 2009a, page 20).

One might expect that in countries where long-term unemployment is high, the immigrant employment gap is higher because unemployment might then hit the more vulnerable group of immigrants more strongly than non-immigrants. Figure 4 suggests that such a tendency is indeed present, and we can point to Poland, Germany and Belgium as clear examples. But there are also important exceptions - in particular Denmark, Sweden and The Netherlands. On top of very low long-term unemployment rates, these latter countries have the highest overall levels of employment among EU Member States (74.2-77.1% in 2007), but these very good performances on the labor market do not extend to the immigrant population. In fact, in these countries the employment rate among non-immigrants is very high, but the employment rate among immigrants is not necessarily lower than it is in countries that score better on the immigrant

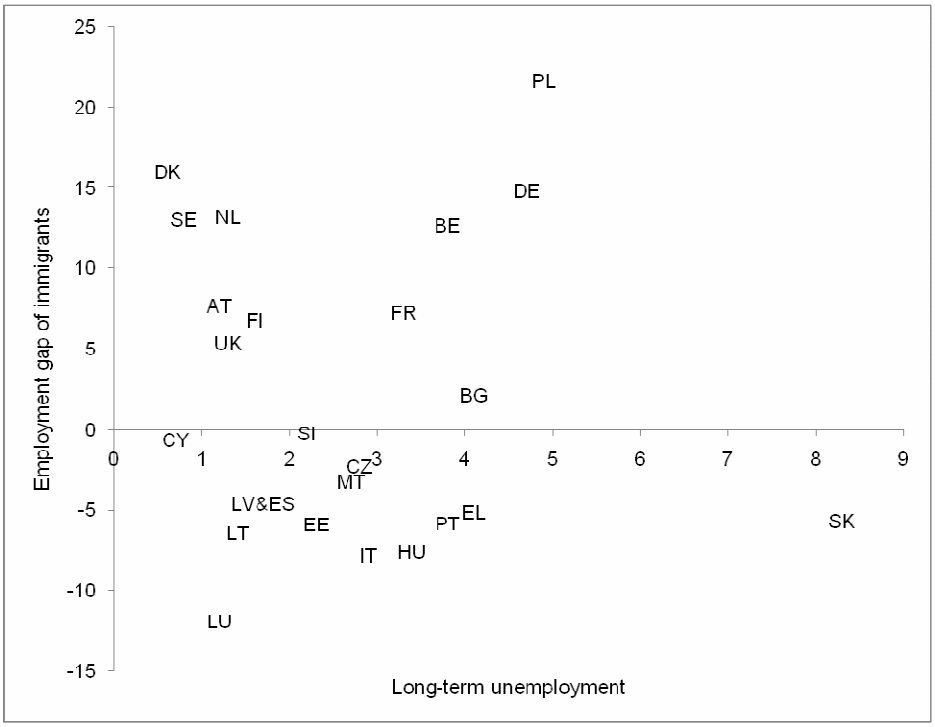
[18] If we disregard Malta, Portugal and Spain, the link between early school leaving and poverty risk is quite strong: R^2 is equal to 0.45.

[19] It is up to each country to decide whether or not they include nationals born abroad, as appropriate.

employment gap (for interesting comparative EU figures on employment and unemployment gap by country of birth and by nationality, see: European Commission, 2009b).[20]

The specific situation of Slovakia needs to be highlighted, as this country combines the highest rate of long-term unemployment with very good performance on the indicator measuring the employment gap of immigrants.

Figure 4: Employment gap of immigrants and Long-term unemployment rate for EU countries, %, LFS, 2007



Note: Data related to employment gap of immigrants are missing for IE and RO; the EU-27 average for the gap is 2.6 and for long-term unemployment 3%

[20] This points to a general problem with indicators that are defined in terms of the difference as regards a certain outcome between a disadvantaged group and an advantaged group. While there are important theoretical reasons for adopting this kind of indicators, these have the drawback that a positive change can be the result of an improvement among the disadvantaged group and/or a decline among the advantaged group. *Mutatis mutandis*, the same applies to comparisons between countries. This makes it difficult to interpret changes over time and differences between countries.

Material deprivation

The measurement of material deprivation has been regularly on the EU agenda since 2004 but it is only since the second half of 2009 that two indicators have been formally agreed and added to the EU set of commonly agreed indicators for social inclusion (see above: indicators P8 in Table 1a and S4 in Table 1b). Originally proposed by Guio (Guio, 2009), these indicators significantly improve the multi-dimensional coverage of the EU portfolio for social inclusion.

Based on the limited information available from the EU-SILC data-set, they focus on the proportion of people living in households who cannot afford at least 3 of the following 9 items: 1) coping with unexpected expenses; 2) one week annual holiday away from home; 3) avoiding arrears (in mortgage or rent, utility bills or hire purchase installments); 4) a meal with meat, chicken or fish every second day; 5) keeping the home adequately warm; 6) a washing machine; 7) a color TV; 8) a telephone; 9) a car. So, these measures aggregate information focused on some key aspects of *material* living conditions; they do not aim at covering all the dimensions of social exclusion (i.e., health, employment, education, social participation, etc). This approach, in terms of "enforced lack", makes the suggested indices more comparable with *inter alia* income poverty (see below).

When using these indicators of material deprivation in a comparative context, two important points need to be highlighted. First, as emphasized by Marlier et al. (2007): "the essential interest here is not so much in individual items *per se* as in the underlying situation of more generalized deprivation that they can help to capture" (page 177). Indeed, "a useful analogy may be the way a battery of different survey responses can be used to categorize respondents by, say, personality type: any one response item may not be a reliable indicator, but taken together a set of responses can provide a very much more reliable basis for categorization" (page 194). The second important point is that whatever the common set of items used throughout the EU for measuring material deprivation, one needs to ensure that these items correctly capture living patterns and expectations of the society; and, therefore, they should be tested regularly to reflect possible societal changes. As indicated in Dickes, Fusco and Marlier (2009), "the recent global economic and financial turmoil is, for instance, likely to affect the national perceptions of social needs".[21]

[21] Dickes et al. (2009) analyze the data of a Eurobarometer survey on "poverty and exclusion" conducted in 2007 on behalf of the European Commission in all 27 Member States. They investigate whether deprivation can be measured on the basis of a same set of items in all EU Member States, and their analysis, primarily based on "Multi-

Therefore, in 2011, when the data from the special 2009 EU-SILC module on material deprivation with a broader set of variables become available, it will be particularly important to come back to these measures in order to refine them.

Table 2a: Material deprivation and Poverty risk threshold for EU countries, EU-SILC, 2007

Country	% of persons deprived for at least 3 out of 9 items	Mean number of items lacked among deprived population	Poverty risk threshold (PPS)
Luxembourg (LU)	3	3.4	17575
Netherlands (NL)	6	3.4	10631
Sweden (SE)	6	3.5	9581
Denmark (DK)	7	3.8	10175
Finland (FI)	9	3.5	9321
Austria (AT)	10	3.5	10933
Spain (ES)	10	3.4	7807
Ireland (IE)	10	3.6	10706
United Kingdom (UK)	10	3.5	11366
Belgium (BE)	12	3.7	10035
Germany (DE)	12	3.6	10403
France (FR)	12	3.6	9363
Malta (MT)	13	3.4	7543
Slovenia (SI)	14	3.5	7979
Estonia (EE)	15	3.6	4059
Italy (IT)	15	3.7	8748
Czech Republic (CZ)	16	3.7	5348
Greece (EL)	22	3.9	6946
Portugal (PT)	22	3.7	5360
Lithuania (LT)	30	4.0	3512
Slovakia (SK)	30	3.7	4133
Cyprus (CY)	31	3.6	10938
Hungary (HU)	37	3.9	3979
Poland (PL)	38	3.9	3422
Latvia (LV)	45	4.0	3356
Romania (RO)	53	4.5	1765
Bulgaria (BG)	72	NA	2006
EU-27 average	17	3.7	-

Note 1: Countries ranked in ascending order based on national percentages of people deprived for 3+ items. Poverty risk thresholds are annual amounts (in PPS, see above) calculated for one-person households

Note 2: Data not available (NA) for BG for "Mean number of lacked items"

Interpretation: In Luxembourg, 3% of the population is "deprived" on the material deprivation indicator, i.e. lack at least 3 out of the 9 items considered; and, on average, the deprived population lacks 3.4 out of these 9 items. The national poverty risk threshold is 17,575 PPS

Dimensional Scaling" (MDS), clearly points to "a high level of agreement among countries about what constitutes necessities of life".

We see from Table 2a that the range across countries in terms of the percentage (materially) deprived is wide – from 3% in Luxembourg and 6% in Sweden and The Netherlands up to as high as 53% in Romania and 72% in Bulgaria. This is much wider than the range in poverty risk rates, which is only from 10% to 25% (see Figure 1a above). This reflects the fact that differences in average living standards across countries as well as the distribution within them now come into play.

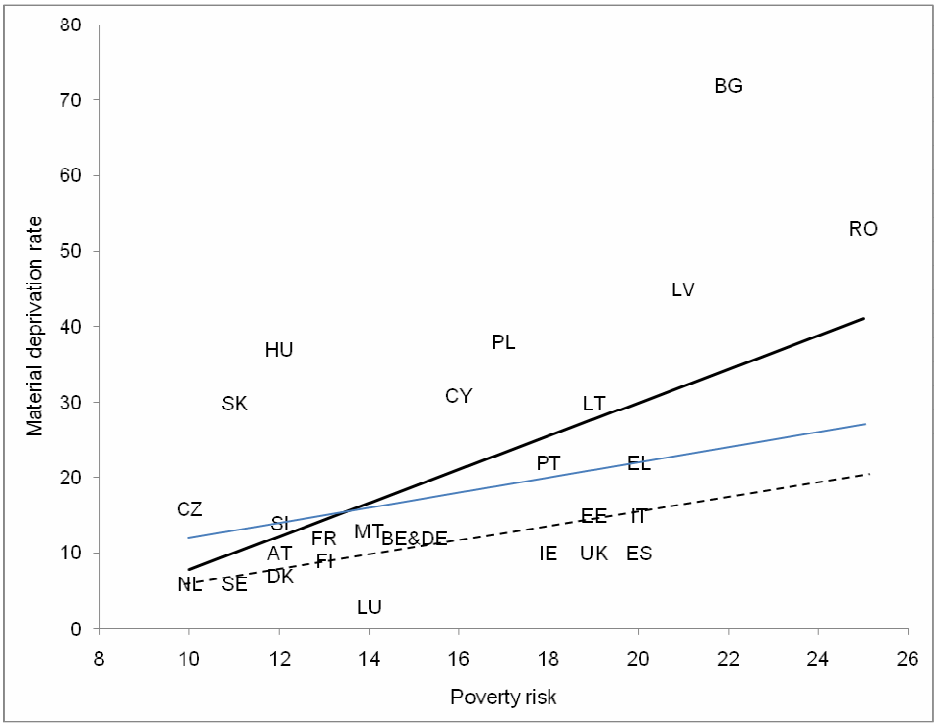
As shown in Figure 5a, the most striking examples in this respect are Hungary and Slovakia (which have high levels of deprivation but low income poverty rates) as well as, though to a lesser extent, the Czech Republic (lowest poverty risk in EU, together with The Netherlands, but intermediate performance on deprivation). Conversely, Spain has a high poverty risk (fourth highest in EU, *ex aequo* with Greece and Italy) whereas it has a below average proportion deprived (6th best performance, *ex aequo* with Austria, Ireland and the UK). If we look more closely at the impact of the two most recent EU Enlargements, we see that among the 15 "old" Member States the link between poverty risk and material deprivation is strong (R^2:0.39). The 2004 Enlargement from 15 to 25 countries (notably Hungary, Slovakia and the Czech Republic; see above) has significantly weakened this link (R^2: 0.10). Finally, the 2007 Enlargement has significantly increased the relationship between these two indicators (R^2: 0.30); this is due to the fact that the two new Member States (Bulgaria and Romania) combine both the highest poverty risk rates and the highest proportions of deprived.

Unfortunately, data that would allow the evolution over time of material deprivation to be tracked only cover the period 2005-2007; and for Bulgaria and Romania, data are only available for 2007. Using the little information available to date, Figure 5b shows that in the EU-15 countries both poverty risk and material deprivation rates have remained stable, while, in the 10 New Member States which joined the EU in 2004 (NMS-10) material deprivation rates have declined significantly (by 5 points between 2005 and 2006 and then by 1 more points between 2006 and 2007) and poverty rates have declined very slightly.

Table 2a also allows us to look at the relationship between deprivation and the national relative income thresholds, which in turn reflect median income levels in each country. We see that the extent of material deprivation is generally much higher in the countries with lower poverty risk thresholds (the R^2 between the proportions deprived and these thresholds is 0.58 for EU-27). Seven of the eight countries with the highest proportions deprived (Bulgaria, Romania,

Latvia, Poland, Hungary, Cyprus, Slovakia and Lithuania: proportions between 30 and 72%) are among the eight countries with the lowest thresholds (all below 4200 PPS). Cyprus, on the other hand, has a high level of deprivation but also a very high income threshold, whereas Estonia has a below EU-27 average deprivation rate but a low threshold.

Figure 5a: Link between Material deprivation and Income poverty: Material deprivation and poverty risk for EU countries, %, EU-SILC, 2007

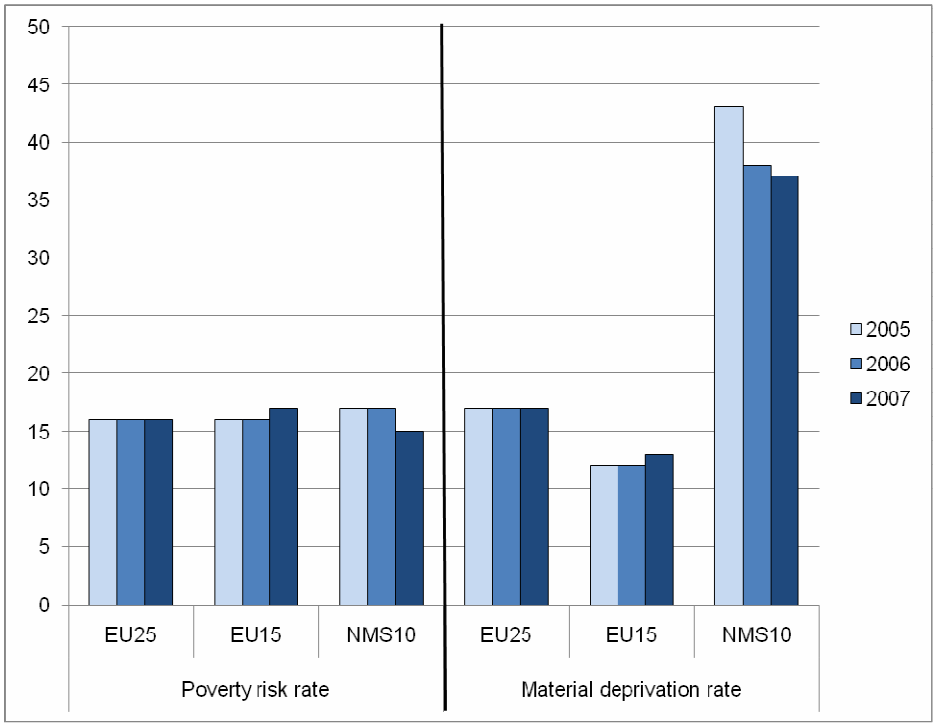


Note: The thick regression line is fitted by ordinary least squares to EU-27 countries, the thin line to EU-25 countries and the dotted line to EU-15 countries

The level of deprivation is clearly influenced by both the level of median income and how many fall well below it, which is what the at-risk-of-poverty rate captures. Countries like Denmark, Finland and Sweden have lower proportions deprived than their level of threshold/median income would suggest, reflecting (at least in part) the fact that income is relatively equally distributed so the proportion falling below the threshold is low. A country like Italy has a higher proportion deprived than its threshold/median income might suggest, consistent with the above-average at-risk-of-poverty rate. Romania and Bulgaria, though, have both the lowest thresholds and the highest at-risk-of-poverty rates in the EU and it is no surprise

that they also have the highest proportion of their populations deprived. Placing the measures of material deprivation alongside the at-risk-of-poverty rates thus helps to bring out in a direct and concrete way the fact that different living standards underpin those poverty rates.

Figure 5b: Evolution over time of Material deprivation and Income poverty for EU countries, %, EU-SILC, 2005-2007



Note: Data missing for BG and RO

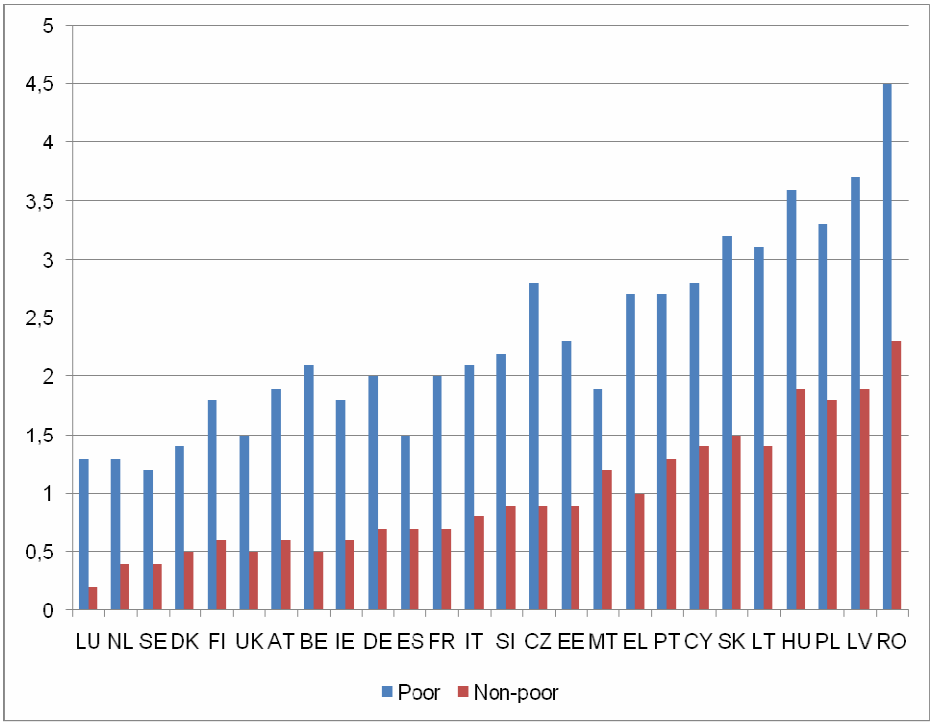
This is also the case when we look in Table 2a at the depth of deprivation (mean number of items lacked) among those above the deprivation cut-off, i.e. living in deprivation: while this does not vary much across countries, it tends to be highest in the countries with the highest proportion deprived. Within countries, Figure 5c shows that the depth of deprivation is everywhere a good deal higher for those below the poverty risk threshold than above it (though the gap is considerably wider in some countries than in others). It also shows that deprivation depth for those at risk of poverty in some of the richer countries is lower than the corresponding

figures for those *not at risk* in the poorest countries.[22] This does not invalidate the poverty measures for the rich countries, because they relate (supposedly) to norms of acceptability in those countries, but it does help reinforce the long-standing importance assigned by the EU to seeking convergence in average income/ living standards across its Member States. (On the latter issue, Marlier et al. (2007) suggest that the EU portfolio of indicators on social inclusion should be complemented with a "background statistic" based on a common income threshold set at 60% of the EU-wide median. The suggested use of this statistic, which could be calculated from pooled EU-SILC data, "is intended to address the key issue of social cohesion/convergence across the Union rather than capturing *absolute* poverty" (page 155).)

The various results presented above bring out the value of complementing the indicators based on the relative EU at-risk-of-poverty measure with indicators of material deprivation, particularly in the enlarged EU. It is also interesting to mention that the association between the material deprivation rate and the median poverty risk gap (i.e., the difference between the income poverty threshold and the median equivalised income of income-poor persons, expressed as a percentage of the income poverty threshold) is stronger (R^2 is 0.59 at EU-27 level; see Table 6 below) than that with the income poverty rate. This brings out that the proportion deprived is influenced not just by the level of the income threshold vis-à-vis other countries and how many are below it, but also how far they fall below the threshold.

[22] In Spain and the UK, for example, the deprivation depth for those at risk of poverty is 1.5, whereas in Latvia and Hungary the corresponding figure for those *not* at risk of poverty is 1.9; in Romania, it is 2.3 (this figure is not available for Bulgaria).

Figure 5c: Overlap between Material deprivation and Income poverty: Mean number of "lacked" items among income-poor and non-income-poor population for EU countries, EU-SILC, 2007



Note 1: In Luxembourg, on average those above the 60% of median income poverty risk threshold lack 0.2 item out of these 9 items while those below the threshold lack 1.3 items

Note 2: Data missing for BG

Finally, the material deprivation indicators are very valuable in the insights they provide into the extent and nature of deprivation being experienced by different groups and household types within countries. For example, comparing the deprivation rates of the elderly and the non-elderly shows that older persons fare better within their societies in Northern "old" Member States than in most "new" Member States or "old" Southern countries (see Table 2b). This may provide a rather different picture to that given by comparisons of income poverty rates within countries, because deprivation indicators will capture not only income differences between groups but also the differential impact of various forms of state provision of services, of assets such as home ownership, and of other factors affecting living standards. This type of analysis provides an important perspective in understanding the needs of different household types and framing policy to respond. (See Dewilde (2008) and Jehoel-Gijsbers and Vrooman (2008).) The EU indicators

also allow one to compare deprivation levels across different groups below the income poverty threshold within countries, and at national level some countries have focused particular attention on those who are both below that threshold and experiencing serious deprivation – sometimes labeled the 'consistently poor' (see Nolan and Whelan, forthcoming). In the light of the well-recognized weaknesses of income alone in comprehensively capturing living standards, this provides a way of prioritizing the most vulnerable within countries (though it would be less suitable for making comparisons across countries with very different levels of relative income poverty and/or deprivation as in the case of the EU).

Table 2b: Material deprivation and Poverty risk for EU countries, National percentages among population aged 18-64 and population aged 65 and over, EU-SILC, 2007

Country	Material deprivation		Poverty risk	
	18-64	65+	18-64	65+
Austria (AT)	10	10	11	14
Belgium (BE)	11	10	13	23
Bulgaria (BG)	69	81	19	23
Cyprus (CY)	29	44	10	51
Czech Republic (CZ)	15	17	8	5
Denmark (DK)	7	4	11	18
Estonia (EE)	14	20	16	33
Finland (FI)	10	8	11	22
France (FR)	12	8	12	13
Germany (DE)	13	7	15	17
Greece (EL)	21	29	19	23
Hungary (HU)	36	35	12	6
Ireland (IE)	10	4	15	29
Italy (IT)	14	14	18	22
Latvia (LV)	42	59	18	33
Lithuania (LT)	28	39	16	30
Luxembourg (LU)	3	1	13	7
Malta (MT)	12	12	12	21
Netherlands (NL)	6	3	9	10
Poland (PL)	38	41	17	8
Portugal (PT)	21	27	15	26
Romania (RO)	49	66	21	31
Slovakia (SK)	28	42	9	8
Slovenia (SI)	14	18	10	19
Spain (ES)	9	11	16	28
Sweden (SE)	6	3	10	11
United Kingdom (UK)	10	5	15	30
NMS-10 average	35	40	14	11
EU-27 average	17	16	15	20

Unmet need for medical care

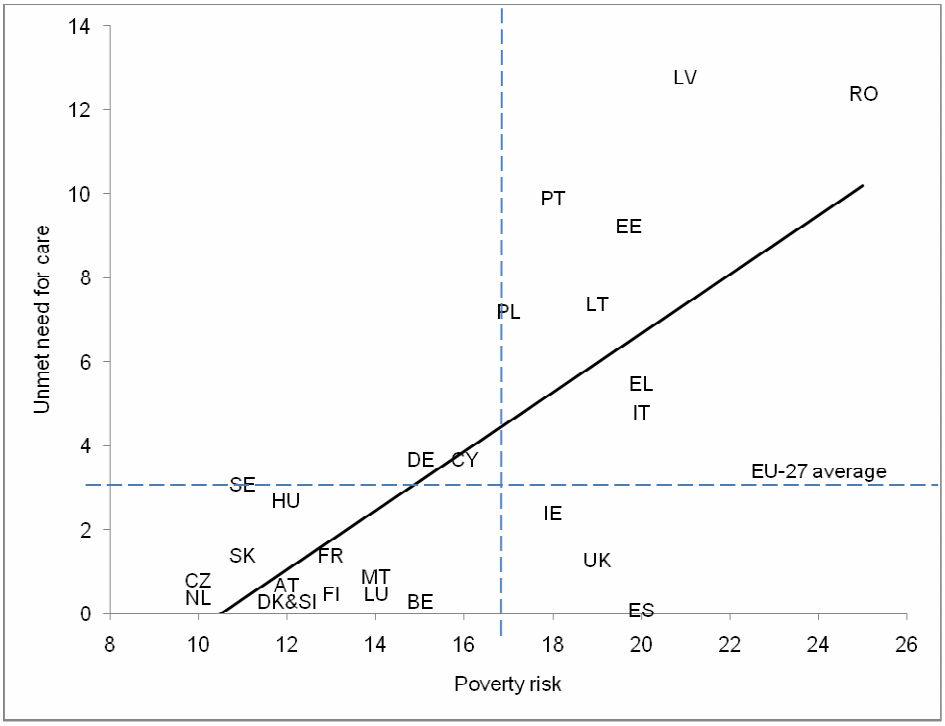
Self-reported unmet need for medical care is defined in the EU portfolio of Primary Indicators for social inclusion as the proportion of persons reporting that they did not obtain medical care they needed for one of the following three reasons: financial barriers, too long waiting times or facility too far to travel. Figure 6 shows that unmet medical need is a nearly non-existing problem in several of the rich EU countries with highly developed welfare states in North-Western Europe as well as in the Czech Republic, Hungary, Malta, Slovakia and Slovenia. Much larger proportions of persons reporting unmet medical need are observed in the Baltic States, Romania, Poland and Portugal as well as, though to a lesser extent, Greece and Italy (there are no data available for Bulgaria).[23]

The relation with the poverty risk has an interesting triangular shape: while some countries with relatively high poverty risks manage to keep unmet medical need very low (Ireland, UK, Spain), there are no countries with low poverty risks and high levels of unmet need. One interpretation of this finding could be that a low poverty risk (as measured by the EU indicator, i.e. in relative terms) can only be sustained by countries with a system of generous social transfers with broad coverage, and that welfare states which achieve that, also provide accessible health care[24].

[23] As mentioned in Table 1a, it would be useful to analyze these figures *inter alia* in the light of the actual health care utilization in the different EU countries.

[24] But the opposite is not true: there are countries with low unmet needs that have high poverty risks.

Figure 6: Unmet need for medical care and Poverty risk for EU countries, %, EU-SILC, 2007



Note 1: Unmet need for care: data missing for BG; "Waiting list" information not available for DK; "Too far to travel" information not available for SI and FI

Note 2: The regression line is fitted by ordinary least squares to the EU-27 countries

Housing indicators

Since the beginning of the Social OMC, the EU had singled out housing as one of the areas that should be regularly monitored at national and EU levels on the basis of commonly agreed indicators (see Social Protection Committee, 2001). But it is only since the second half of 2009 that housing is covered in the EU portfolio of indicators for social inclusion. Despite this major step forward, some important dimensions of housing are not yet covered and further progress in these fields will be needed. The EU has not yet adopted any Primary Indicator in the field of housing, so this section focuses on the two Secondary Indicators now included in the EU portfolio (see Table 1b): indicators S5 (households with high housing costs) and S6 (overcrowding).

The "burdened by housing costs" indicator measures the percentage of the population living in a household where the total housing costs (net of housing allowances) represent more than

40% of the total disposable household income (net of housing allowances). The 'overcrowding rate' represents the percentage of people living in a household where at least one of the following criteria is not fulfilled: one room for the household, one room for each couple, one room for each single person aged 18+, one room for two single people of the same sex between 12 and 17 years of age, one room for each single person of different sex between 12 and 17 years of age and one room for two people under 12 years of age. The values reported here are for all households, i.e. including one-person households.[25]

It is worth noting that there is very little association between the two housing indicators which indeed shed light on very different aspects of housing. A relatively large group of countries perform quite well on both indicators whereas Bulgaria, Romania and Slovakia perform poorly on both. A number of "old" EU Member States with relatively high median incomes (Germany, Denmark, the Netherlands and the UK) combine low overcrowding rates and relatively high levels of housing costs burden. By contrast, a set of countries have low proportions of people burdened by housing costs but high rates of overcrowding; all of these are "new" Member States. Cyprus and Malta are exceptions as on both indicators they have the best results in the whole EU-27.

At the macro level, there is no clear link between the at-risk-of-poverty rate and the two EU indicators on housing. For the EU-27 countries, the R^2 between poverty risk and overcrowding is 0.15 and between poverty risk and housing cost burden it is even lower (0.06). If we now change the unit of analysis and move from country to people and households, i.e. from macro to micro level, then the picture becomes different as can be seen from Table 3. At EU-27 level, the proportion of persons living in overcrowded households is almost two times higher in the income-poor population than in the non-income-poor population (27 % vs. 15%). For the indicator on housing cost burden, the difference is even more striking: 39% as opposed to 8%, i.e. a ratio close to 5.

If we move back to our main unit of analysis (i.e., individual countries) and consider the macro-level link between overcrowding and material deprivation (rather than poverty risk), the association between these two EU indicators is quite strong with an R^2 of 0.58 for the EU-27.

[25] Given the definition adopted, one-person households are considered overcrowded if they live in a studio with a bedroom not separated from the living room. An indicator excluding one-person households has also been agreed upon at EU level.

The link is much weaker between material deprivation and housing cost burden, where the R^2 is 0.28 for EU-27.

Table 3: Overlap between housing and income poverty: Overcrowded households and Housing cost burden among income-poor and non-income-poor population for EU countries, %, EU-SILC, 2007

Country	Overcrowding			Burdened by Housing costs		
	Non-poor	Poor	Total	Non-poor	Poor	Total
Austria (AT)	12	33	15	2	32	5
Belgium (BE)	2	10	4	5	39	10
Bulgaria (BG)	47	62	50	32	70	40
Cyprus (CY)	1	4	1	1	8	2
Czech Republic (CZ)	29	63	32	7	39	10
Denmark (DK)	5	22	7	8	58	13
Estonia (EE)	42	47	43	2	19	5
Finland (FI)	4	18	6	3	18	5
France (FR)	7	22	9	4	19	6
Germany (DE)	2	8	3	16	68	23
Greece (GR)	26	35	28	3	66	16
Hungary (HU)	44	63	46	4	32	7
Ireland (IE)	3	5	4	1	12	3
Italy (IT)	20	37	24	3	27	8
Latvia (LV)	60	57	59	4	31	10
Lithuania (LT)	50	57	52	1	20	5
Luxembourg (LU)	5	26	7	1	23	4
Malta (MT)	4	3	4	1	11	3
Netherlands (NL)	1	6	2	14	61	19
Poland (PL)	48	68	52	6	33	11
Portugal (PT)	14	21	15	4	22	7
Romania (RO)	53	59	54	10	43	18
Slovakia (SK)	39	56	41	15	53	19
Slovenia (SI)	38	48	39	3	22	5
Spain (ES)	3	7	4	3	22	7
Sweden (SE)	7	28	9	3	46	8
United Kingdom (UK)	4	11	6	10	47	17
EU-27 average	15	27	17	8	39	13

4. The portfolio of indicators as a whole

Building on the results presented in Section 3, we now look more closely at the value added of a multi-dimensional portfolio of indicators for monitoring the Social OMC. First, we look at the way countries are ranked on the basis of each individual Primary Indicator. In doing this, we disregard indicators P7 and P10 (i.e. "Employment gap of immigrants" and "Self-reported unmet

need for medical care"; see Table 1a) as these are labeled "National", meaning, as discussed above, that they do not meet all the methodological criteria required for "EU" indicators proper. In particular, this means that they should not be used for direct cross-country comparisons (such as international rankings) without being properly contextualized. So, in the first sub-section we consider only the 6 "EU" Primary Indicators for social inclusion available to date. For exploring the relationship between indicators, an alternative to rankings is to consider the correlations of the indicators' values. This is what we do in the second sub-section, where we explore the extent to which the Primary Indicators are correlated at the *macro-level*. Here, we consider all 8 Primary Indicators available, i.e. both the 6 "EU" measures and the 2 "National" measures. Finally, in the third sub-section we briefly discuss whether a composite indicator might be useful in an EU comparative context.

Inter-relation between indicators: rankings

From our discussion of the different indicators in Section 3, it is clear that the various indicators for social inclusion agreed upon by the EU do indeed tell a different story about the relative social performances of the various EU Member States. They also tell different stories in terms of policy evaluation.

As an illustration, we first focus on the six "EU" indicators included in the social inclusion portfolio and explore their interaction more explicitly: the at-risk-of-poverty rate, relative median poverty risk gap, long-term unemployment, adults living in jobless households, early school leavers and material deprivation. Table 4 shows the rankings, from 1st position (best performance, i.e., in view of the nature of the indicators considered, lowest percentage) to 27th position (poorest performance), of the EU-27 countries on each of these indicators. There is considerable movement up and down the ranking as we move from one indicator to another. When the common indicators were first mooted, there was general agreement that they should be multi-dimensional. This view was held largely on *a priori* grounds: that it was right in principle. Now that we have the experience of values being given to the indicators, enriched by Enlargement, we can see that the multi-dimensional approach is indeed crucial. The best performers on poverty risk have a strong tendency to be ranked lower on long-term unemployment and/or on the proportion of adults living in jobless households. Fourteen

countries (8 "old" and 6 "new" Member States) feature in the top three countries for at least one of the six indicators. Thus, just over half of the EU countries can claim to be in the "top three".

Table 4: Ranking of EU countries for six Primary Indicators of social inclusion, EU-SILC and LFS, 2007

Country	Poverty risk	Median poverty risk gap	Long-term unemployment	Adults in jobless households	Early school leavers	Material deprivation
Czech Republic (CZ)	1	7	16	5	2	17
Netherlands (NL)	1	2	6	5	10	2
Sweden (SE)	3	13	3	NA	5	2
Slovakia (SK)	3	10	27	16	3	20
Austria (AT)	5	2	4	11	7	6
Denmark (DK)	5	2	1	12	12	4
Hungary (HU)	5	13	20	25	7	23
Slovenia (SI)	5	10	13	5	NA	14
Finland (FI)	9	1	10	17	4	5
France (FR)	9	2	19	20	14	10
Luxembourg (LU)	11	10	4	9	18	1
Malta (MT)	11	2	15	12	26	13
Belgium (BE)	13	7	21	26	11	10
Germany (DE)	13	19	25	19	14	10
Cyprus (CY)	15	13	2	1	13	22
Poland (PL)	16	19	26	24	1	24
Ireland (IE)	17	7	8	14	9	6
Portugal (PT)	17	19	21	2	25	18
Estonia (EE)	19	13	14	3	16	15
Lithuania (LT)	19	24	8	9	6	20
United Kingdom (UK)	19	18	6	23	21	6
Spain (ES)	22	19	12	4	24	6
Greece (EL)	22	24	23	15	17	18
Italy (IT)	22	17	17	18	23	15
Latvia (LV)	25	23	10	8	19	25
Bulgaria (BG)	26	26	23	21	20	27
Romania (RO)	27	27	18	22	22	26

Note 1 (Poverty gap): provisional data for PT

Note 2 (Jobless households): 2006 data for DK and data not available (NA) for Sweden

Note 3 (Early school leavers): provisional data for LV and PT; 2006 data for CZ; unreliable/uncertain data for SI

Note 4: For each indicator, the 1st position is given to the country that has the "best" performance (i.e. respectively: lowest poverty risk rate, lowest long-term unemployment rate, lowest proportion of adults in jobless households, lowest percentage of early school leavers and lowest materially deprived population), the second to the country that has the second "best" performance, etc. Countries with equal rates are assigned equal rankings. The order of countries in the Table reflects the ranking on the poverty risk indicator

Another way of conveying the same type of message is to look at the same six Primary Indicators and, for each of them, to divide countries into quartiles taking the median across countries as the "benchmark". This is what we do in Table 5. As for all six indicators, a low value represents a good performance, countries in the first quartile are marked '++', in the second quartile '+', in the third '-' and in the fourth '--'. (In interpreting the results, it should be borne in mind that the various dimensions of poverty and social exclusion covered by the indicators are represented by differing numbers of indicators.)

The second-last column in Table 5 provides the number of EU Primary Indicators on which each country performs poorly relative to the median (scores '-' or '—'). It shows a much denser concentration of poor performances (at least 5 out of 6) for Bulgaria, Estonia, Greece, Italy, Poland, Portugal and Romania. Conversely, some countries stand out for the small number (maximum 1) of poor performances; these include various rich countries with extensive welfare states (Austria, Denmark, Finland, Luxembourg, the Netherlands and Sweden) as well as Slovenia. In order to better identify the good performance, the last column in Table 5 indicates the number of EU Primary Indicators on which each country performs in the top quarter ('++'), which may be helpful in seeking to spot possible good practices. All except eight countries (Belgium, Bulgaria, Germany, Greece, Ireland, Italy, Latvia and Romania) are in the top quarter for at least one of the six indicators considered. The subset of best-performing countries (3 or more '++') is close though not identical to the one identified earlier. It consists of Austria, Denmark, Finland, the Netherlands and Sweden (as above), and also of the Czech Republic (new); Luxembourg and Slovenia are no longer part of the list.

The fact that 19 countries out of 27 are in the top quarter for at least one indicator illustrates the diversity in national situations and national policies. It also serves to bring out the importance for countries and the European Commission of making full use of the whole EU portfolio of indicators rather than solely concentrating on a few lead indicators.

Table 5: Quartile scores of EU countries for six Primary Indicators of social inclusion, EU-SILC and LFS, 2007

Country	Poverty risk	Poverty gap	Long-term unemployment	Adults in jobless households	Early school leavers	Material deprivation	Poorest performance (- or - -)	Best performance (++)
Austria	++	++	++	+	+	+	0	3
Belgium	+	+	- -	- -	+	+	2	0
Bulgaria	- -	- -	- -	- -	-	- -	6	0
Cyprus	-	-	++	++	+	- -	3	2
Czech Republic	++	+	-	++	++	-	2	3
Denmark	++	++	++	+	+	++	0	4
Estonia	-	-	-	++	-	-	5	1
Finland	+	++	+	-	++	++	1	3
France	+	++	-	-	-	+	3	1
Germany	+	-	- -	-	-	+	4	0
Greece	- -	- -	- -	-	-	-	6	0
Hungary	++	-	-	- -	+	- -	4	1
Ireland	-	+	+	-	+	+	2	0
Italy	- -	-	-	-	- -	-	6	0
Latvia	- -	- -	+	+	-	- -	4	0
Lithuania	-	- -	+	+	++	-	3	1
Luxembourg	+	+	++	+	-	++	1	2
Malta	+	++	-	+	- -	+	2	1
Netherlands	++	++	++	++	+	++	0	5
Poland	-	-	- -	- -	++	- -	5	1
Portugal	-	-	- -	++	- -	-	5	1
Romania	- -	- -	-	- -	- -	- -	6	0
Slovakia	++	+	- -	-	++	-	3	2
Slovenia	++	+	+	++	NA	-	1	2
Spain	- -	-	+	++	- -	+	3	1
Sweden	++	-	++	NA	++	++	1	4
United Kingdom	-	-	++	- -	- -	+	4	1

Note: For all indicators considered, a high value represents a poor national performance. Country figures are being compared with the EU median for each indicator. '++' indicates that the country's performance is in the first quartile,' +' in the second; '-' in the third and '- -' in the fourth quartile; 'NA' refers to non-available data

Inter-relation between indicators: correlations

Rankings may be misleading, since, where observations are bunched, a country may lose several places on account of a tiny difference. An alternative is provided by the correlations of the indicator values (though these are more easily affected than rankings by outliers). If the different indicators are highly correlated across countries, then this suggests that there is little value added from considering additional dimensions in determining *stricto sensu* their relative performance. It should be re-emphasized that we are considering here countries as the unit of analysis. We learn nothing from these correlations about the extent to which risks are correlated

at the individual level within any country. The at-risk-of-poverty rate may be much higher in countries with high rates of early school leavers, but this does not automatically imply that individual early school leavers in country A are at higher risk of poverty. In order to explore the latter correlation, we would have to go back to the micro-data, i.e. the observations on individual persons and households which is not the purpose of our discussion here.

Table 6 shows the correlations between the Primary Indicators for which data are available. If we first look at the poverty risk rate (which is clearly the lead indicator in the Primary list), we see that it correlates very strongly with the relative median poverty risk gap (0.81) and unmet need for medical care (0.72) as well as, quite strongly, with material deprivation (0.55). As to the poverty gap, it correlates very strongly with unmet need for medical care (0.75) and also, as already highlighted above, with material deprivation (0.77, i.e. a much higher correlation than for the poverty risk).

The correlations of poverty risk and poverty risk gap with the indicators of labor market exclusion are very low (we come back to this below). By contrast, the association between long-term unemployment and material deprivation is limited (0.38) but yet significant at the 0.05 level.

Among the other indicators, we can see a number of significant correlations among the indicators of labor market exclusion, even if they are not very high. This is the case between jobless households and employment gap of immigrants (0.40) and also, as previously emphasized, long-term unemployment and adults living in jobless households (0.45).

Otherwise, the only significant, and in fact very strong, correlation is observed between deprivation and unmet need for medical care (0.73).

Why are the correlations among most of the indicators very small or even insignificant? First of all, and most obviously, some indicators refer to quite different domains and low correlations are therefore not particularly surprising. There is *a priori* no particular reason why countries that perform well on dealing with early school leavers should also be successful in satisfactorily meeting the medical needs of their population, and in fact we observe no correlation between these indicators. But there are also instances where low correlations are unexpected. An instructive example is the nearly zero correlation between the joblessness measure and the poverty risk rate. If one looks within nearly all EU countries one finds a very strong association at the household level between joblessness and poverty risk, as can be seen from the examination

of the EU poverty risk indicator broken down by the "work intensity" of the household. One might therefore expect that countries where there are many jobless households would also have higher poverty risk rates. This would certainly be correct, but for the fact that other variables intervene.

In fact, an important intervening variable is the extent of income protection. It is well known that there is a strong negative correlation between the extent of social income protection and the poverty risk rate. It has more rarely been observed that there is in fact a *positive* relation between the degree of income protection and the proportion of jobless households. That there is such a relation makes perfect sense: in the absence of social protection, living in a jobless household is often not a viable option, and people either have to find work, or become part of another household. The fact that both poverty risk and joblessness are correlated with the degree of income protection, but with opposite signs, explains why we find little correlation across countries between the first two variables.

The example of poverty risk, joblessness and income protection contains a more general point, which is relevant to the policy lessons which can be derived from such indicators: sometimes there is a trade-off between different policy objectives, where increasing the effectiveness of a particular policy instrument as regards one objective may in fact exacerbate other problems. Governments often have to define priorities – investing in schools or in hospitals – because of budget constraints. Moreover, societies can make different democratic choices. These are important reasons why one should not rely on one or two indicators, but should use the entire portfolio.

Table 6: Correlations among the Primary Indicators across EU-27 countries, EU-SILC and LFS, 2007

	Poverty risk	Poverty risk gap	Long-term unemployment	Adults in jobless households	Early school leavers	Employment gap of immigrants	Material deprivation	Unmet need for care
Poverty risk	1,00	0,81 **	0,03	0,09	0,38	-0,32	0,55 **	0,72 **
Poverty gap	0,81 **	1,00	0,25	0,19	0,21	-0,18	0,77 **	0,75 **
Long-term unemployment	0,03	0,25	1,00	0,45 *	-0,05	-0,04	0,38 *	0,13
Adults in jobless households	0,09	0,19	0,45 *	1,00	-0,26	0,40 *	0,27	-0,06
Early school leavers	0,38	0,21	-0,05	-0,26	1,00	-0,37	-0,02	0,15
Employment gap of immigrants	-0,32	-0,18	-0,04	0,40 *	-0,37	1,00	-0,18	-0,25
Material deprivation	0,55 **	0,77 **	0,38 *	0,27	-0,02	-0,18	1,00	0,73 **
Unmet need for care	0,72 **	0,75 **	0,13	-0,06	0,15	-0,25	0,73 **	1,00

Note: Correlations calculated pairwise (pairwise exclusion of missing values); (**) indicates that the correlation is significant at the 0.01 level (2-tailed) and (*) that it is significant at the 0.05 level (2-tailed).

A composite indicator?

An issue that inevitably arises when dealing with a multi-dimensional set of indicators is whether it is helpful to add up indicators for different fields to arrive at a total score, to which we refer here as a "composite" indicator.[26] The popularity of such an approach has been demonstrated *inter alia* by the UNDP Human Development Index (HDI), which is a composite of three basic components: longevity, education and standard of living. Certainly, for the general public, composite indicators can serve a 'headline' function, and newspapers are keen to report the resulting rankings of countries. In this way, the attention of the public can be drawn to issues in which they otherwise would show little interest. There are, however, a number of technical and political reasons why we do not feel that composite measures can play a useful monitoring role as part of the Social OMC or in other international policy frameworks.

The design of any such index requires us to make social judgments about the weights to be placed on the different dimensions and the way in which they are combined. The weights are a matter for value judgments, and the adoption of a specific composite index may conceal the

[26] It is important to highlight that our focus here is not on aggregate indices such as the one discussed in the Section on material deprivation. Instead of first aggregating across fields for an individual and then across individuals (as in the deprivation measure), in what we call here "composite indicator" the aggregation is made first across people and then across fields. A composite indicator is thus a combination of aggregate indicators.

resolution of what is at heart a political problem. It ignores the advice that "weighing together different welfare components should be avoided to the very last so as not to conceal dissensions in a 'scientific' model" (Erikson, 1974, page 279).

The aim of policy should be to improve overall performance and, ideally, bring all countries to a high level, with countries encouraged to pursue a balanced approach to different dimensions of deprivation rather than "bang bang" policies concentrating on a single objective, This is best achieved by focusing on a portfolio of indicators rather than a single measure that seeks to summarise performance across them.[27]

5. Conclusions and moving forward

In this paper, we have seen that the EU portfolio of commonly agreed indicators serves to bring out the diversity and multidimensionality of poverty and social exclusion and also of national situations and policies. This we regard as the key message from the EU experience that might usefully be injected into US debates, which have tended to focus on how best to improve the measure of income poverty rather than broaden the range of information employed. Of course, the EU has adopted indicators which meet its specific needs as a union of Member States, so that measures which adopt a national rather than EU-wide frame of reference in assessing what constitutes an acceptable minimum standard of living have a major role. None the less, the enlargement of the EU to include a much broader range of countries in terms of average income has also reinforced the long-standing commitment to working towards convergence in living standards across countries.

It is important to re-emphasize that no country scores consistently better than the cross-country median on all indicators, and that most countries excel (are in the top quartile) on at least one indicator. Across countries, there is remarkably little correlation between different indicators, reflecting different social, demographic and economic situations, but also different (implicit) policy priorities and trade-offs. Even where indicators are quite strongly correlated across countries, there are always countries which do not conform to the general pattern and these cases may contain valuable policy lessons (e.g. the poverty rate and unmet medical need). The case for a comprehensive portfolio of indicators, covering all key dimensions of the

[27] For a detailed discussion on composite indicators, see Marlier et al. (pages 182-185).

common EU objectives and balanced across the different dimensions, seems thus well established.

Some remaining gaps in the current EU portfolio of social inclusion indicators may be noted. The need for Primary Indicators on housing and child well-being is explicitly flagged for development and insertion in the EU set (see Table 1a). The Indicators Sub-Group of the EU Social Protection Committee and Eurostat have already devoted considerable effort to discussion and analysis of the options in these areas, and in the space available we simply highlight some suggestions in other fields without being able to tease out the arguments in detail.[28]

An important priority might now be given to the development of a measure of premature mortality or life expectancy by socio-economic circumstances, to be produced on a regular but not necessarily annual basis. Another area meriting attention is mental health and disability, where problems in definition and data loom large. Some of the existing EU indicators should also be refined - for example, an EU indicator of literacy for the working age population would be a useful complement to the existing one for second-level school pupils, regional breakdowns for existing indicators where possible would be a valuable addition, and it would be highly valuable to complement the "working poor" EU indicator with a measure of the extent of low pay. The highly complex issue of intra-household allocation of resources (the topic for the 2010 EU-SILC module) will have to be further explored. Progress would also be needed in the understanding of the dynamics of income, poverty and social exclusion at the *micro*-level, based on panel data, and the factors/ processes associated with it (including the inter-generational transmission of disadvantage).

People living in institutions, migrants and ethnic minorities, other vulnerable groups including the homeless[29], people with disabilities, those with addiction problems etc. are generally under-counted or missed by household surveys, and these require special attention. In view of the importance attached to learning about what does and does not work elsewhere, the EU institutions should also consider, in collaboration with OECD, the extension of (some of) the commonly agreed social indicators to cover for example the US, Australia, Canada, Japan and

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[28] For a detailed discussion see Marlier et al. (2007), Chapter 5. See also Marlier (2008).

[29] On the measurement of homelessness, see *inter alia* the web-site of the EU-funded project on "Mutual Progress on Homelessness through Advancing and Strengthening Information Systems" (MPHASIS): http://www.trp.dundee.ac.uk/research/mphasis/.

New Zealand. This would clearly also be of considerable value to the countries such as the US in facilitating investigation of the factors underlying differences in performance – on the indicators they decide to focus on – between them and elsewhere.

It will also be important to enhance understanding of what the at-risk-of-poverty rates in the different Member States, which are at the core of the set of indicators, actually mean in concrete terms. Providing the value of the national thresholds expressed in PPS is obviously valuable contextual information, but one ought to go further by investigating what these thresholds imply in terms of actual standard of living in each Member State. What can a household on 60% of the median income, adjusted for its size and composition, in each country actually consume? A comparison with budget standard studies, which have been carried out in various countries, would be very useful in this regard (even when these standards are not fully comparable). Information on the actual expenditures of households around the poverty line could also help. A next step would be to use this information to investigate how much the appropriate Purchasing Power Parities adjustment varies across the income distribution in the different Member States. If the price relativities were moving against the poor, then this would become apparent from the implied budgets.[30] Such an analysis could valuably be supplemented by qualitative information on how people "at risk" actually live. This approach would make more meaningful the otherwise arcane statistical procedures on which the poverty risk indicator is based. It would also be a good way to engage those experiencing poverty and social exclusion, including the organizations representing them, and other bodies. The extent of deprivation being experienced by those below the income thresholds, and which types of household are most likely to be both on low income and deprived, is also important information in this context. This approach may once again have considerable relevance for the US as it considers how to re-frame its official poverty measurement, providing a way of identifying and prioritizing the most vulnerable.

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[30] As has been emphasized in research on the monitoring of the Millennium Development Goals, the relevant adjustment is one that relates to consumption, not national product in total, and one that is relevant to households at risk of poverty. As it is put by Deaton, "the consumption bundles of the poor are not the same as the average consumption bundle, and price movements in the latter can be different from price movements in the former, for example if the relative price of food increases." (2002, page 1.9). If we are going to place more reliance on the PPS adjustments, then their distributional salience needs to be addressed. The economic and financial crisis has made this even more important.

Finally, it will be important to investigate in a systematic way the relationship between the level of the relative income thresholds and the minimum income provided or implied in most EU countries' national social security systems. The EU and OECD have already started looking into this. It is often not a straightforward matter since the minimum guaranteed income can be complex to define, with support coming from a variety of schemes and varying not only with household size and composition but also with tenure and housing costs and perhaps other features of the household's situation. It would however be very useful both in providing a benchmark against which the level of the relative income thresholds in different countries can be framed, and indeed understanding the varying proportions falling below those thresholds. This can be seen as one example of the broader issue of linking what is happening in terms of social protection and social inclusion with developments in the broader economy, including employment and incomes, which has become even more important with the economic and financial crisis. While their institutional contexts and priorities may be quite different, the EU and the US share the recognized need to tackle poverty and social exclusion more effectively in the face of that crisis. The EU's broad-ranging approach to monitoring progress towards social inclusion has developed very rapidly over the last decade and in doing so has had to deal with many of the issues which underpin US debates. It illustrates that while seeking to refine the measure of income poverty is important, incorporating indicators relating to other dimensions provides a more comprehensive basis for assessing progress and designing policy responses.

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Annex 1: List of EU countries with their official abbreviations

"Old" Member States		"New" Member States	
AT	Austria	***2004 Enlargement***	
BE	Belgium	CY	Cyprus
DK	Denmark	CZ	Czech Republic
FI	Finland	EE	Estonia
FR	France	HU	Hungary
DE	Germany	LV	Latvia
EL	Greece	LT	Lithuania
IE	Ireland	MT	Malta
IT	Italy	PL	Poland
LU	Luxembourg	SK	Slovakia
NL	The Netherlands	SI	Slovenia
PT	Portugal		
ES	Spain	***2007 Enlargement***	
SE	Sweden	BG	Bulgaria
UK	United Kingdom	RO	Romania

Various European Union averages are presented in this paper. In these averages, countries are weighted by their population sizes:

- EU-15 averages are weighted averages limited to the 15 "old" Member States;
- NMS-10 ("New Member States 10") are weighted averages limited to the 10 "new" Member States which joined the EU in 2004;
- EU-25 averages are weighted averages covering all 27 EU Member States except Bulgaria and Romania; and
- EU-27 averages are weighted averages covering all 27 EU Member States.

Annex 2: Data sources, data collection year, income reference year and income concept

Figures discussed in this paper come from the *Community Statistics on Income and Living Conditions* (EU-SILC) and the EU Labor Force Surveys (LFS). For detailed information on these sources, see Eurostat web-site:
http://epp.eurostat.ec.europa.eu/portal/page/portal/eurostat/home.

The most recent EU-SILC data available when finalizing this paper were those collected in 2007. Therefore, with a view to ensuring consistency between the two sources, both EU-SILC and LFS data analyzed in this paper are from 2007 except for very few national results (all exceptions are clearly indicated).

It is important to stress that in EU-SILC, income data generally refer to the total annual income of households (earnings, social benefits, income from capital…) in the year prior to the survey as this is generally considered the best *proxy* for the current total annual household income. The sole exceptions are the United Kingdom (total annual household income calculated on the basis of current income) and Ireland (calculation on the basis of a moving income reference period covering part of the year of the interview and part of the year prior to the survey). It is important to keep in mind that the definition of income used for all income-based indicators that have been commonly agreed by the EU for monitoring the Social OMC excludes non-monetary income components such as imputed rents, the value of goods produced for own consumption and non-cash employee income. It is also important to mention that in order to reflect differences in household size and composition, all commonly agreed income-based indicators for the Social OMC are computed on the basis of income per "equivalent adult" or "equivalised income". In other words, the total household income (which includes earnings from work, income from investment and property and all social benefits received in cash) is divided by its equivalent size using the so-called "modified OECD equivalence scale". This scale assigns a value of 1 to the first adult in the household, 0.5 to each other adult, and 0.3 to each child below the age of 14. The resulting figure is attributed to each member of the household, whether adult or children.

The equivalent size of a household that consists of 2 adults and 2 children below the age of 14 is therefore: 1.0+0.5+(2*0.3) = 2.1.

Most data analyzed were downloaded from the Eurostat web-page dedicated to the indicators for the social inclusion strand of the Social OMC (date of download: 24 September 2009): http://epp.eurostat.ec.europa.eu/portal/page/portal/employment_and_social_policy_indicators/omc_social_inclusion_and_social_protection/social_inclusion_strand.

For the indicator on "unmet need for care", the source is the Eurostat website related to public health statistics. Calculations are based on the statistic "people with unmet needs for medical examination" and, in line with the EU definition, combines the three following reasons: "waiting list", "too expensive" and "too far to travel".

For the indicator on "employment gap of immigrants", the data source is the 2009 European Commission Compendium on "Indicators for monitoring the Employment Guidelines including indicators for additional employment analysis": http://ec.europa.eu/social/BlobServlet?docId=115&langId=en.

Finally, some calculations not (yet) available from the Eurostat web-site were kindly carried out by the EU-SILC team at Eurostat. This is the case for the mean number of "lacked" items (EU indicator on material deprivation) among the income-poor and non-income-poor population as well as for the two EU indicators on housing (housing costs burden and overcrowding). We would like to thank Eurostat for providing us with these calculations.