# Research note no. 5

## *The effects of Minimum Income schemes on the working-age population in the European Union*

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**ABSTRACT**

*The purpose of this paper is to explore and compare the effectiveness of Minimum Income (MI) schemes in the European Union in protecting people of working age from poverty. These are the cash benefits of "last resort" that are intended to provide a minimum level of support. Using the EU-wide microsimulation model EUROMOD, we present the methodological steps necessary to investigate two issues. The first one is the adequacy of the MI schemes in relation to the level of income achieved by other people, in other countries, and relative to the poverty threshold. The second issue is whether the minimum level of income is in fact guaranteed, or whether there are groups of working age people who do not qualify and fall below the threshold for one reason or another.*

*Previous comparative studies on the effects of MI benefits have tended to rely on comparisons of the effects on stylised households or analyse survey data directly. However, using EUROMOD it is possible to capture the full range of individual and household circumstances, to identify each MI benefit separately, to identify the relevant MI assessment unit, to illustrate the effects of changes in MI schemes. It also makes possible the use of a comparable approach across countries in the simulation of the entitlements to MI schemes, which generally provide an upper bound on the likely actual effects of MI schemes.*

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# The effects of Minimum Income Schemes on the working-age population in the European Union

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# I. Introduction

The purpose of this paper is to explore and compare the effectiveness of Minimum Income (MI) schemes in the European Union in protecting people of working age from poverty. These are the cash benefits of "last resort" that are intended to provide a minimum level of support when income from the market, from other contributory or contingency cash benefits or from other family members, is non-existent or insufficient. Thus the level of income of a person in receipt of MI is, in effect, the minimum level of income that is deemed acceptable for that type of person by the social protection system in that country. The first question is the adequacy of that level of income in relation to the level achieved by other types of people and in other countries, and relative to the poverty threshold. The second question is whether the equivalent of that level of income is in fact guaranteed, or whether there are groups of working age people who do not qualify and fall below the threshold for one reason or another. We explore both issues.

The empirical evidence that is presented here is largely intended as a set of first steps in developing a methodology for such investigations, based on tax-benefit microsimulation modelling, using EUROMOD. First of all, in section 2, the scope of what we consider to be an MI scheme is discussed, and the issues for cross-country comparability of any such definition are raised. Section 3 explains the methods that are used, including a description of EUROMOD and a discussion of its advantages relative to other approaches, as well as an introduction to the countries, policy years, data samples and categorical definitions that are used in our empirical analysis. One issue in particular deserves attention: our interest is in individuals of working age and the extent to which MI schemes protect them from poverty. But poverty is conventionally measured using household income; and MI benefits, while sometimes assessed for whole households, are typically assessed on the basis of the material circumstances of a smaller inner-family unit. Taking account of these multiple levels of income assessment and analysis is important in the context of the questions addressed here, and the approach that is taken is explained in section 3.

One of the primary aims of MI schemes is to help protect people from poverty and social exclusion. Section 4 describes how the two groups – the poor and those in receipt of MI benefits – overlap. We then consider the two key aspects of MI schemes, coverage and adequacy, in turn (sections 5 and 6) and this is followed by a discussion of the incentive effects of MI schemes in section 7. The analysis of adequacy and coverage raises many methodological issues, especially in relation to the critical points of equivalence across countries of the choice of benefit schemes to be considered as "MI" schemes on the one hand, and to the treatment of non take-up of benefits on the other. Finally, the relevance of

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these issues, together with some others, and the prospects for refining the analysis to take better account of them, is discussed in section 8.

# II. Minimum Income schemes in the EU27

The scope of the term "MI schemes" is not easy to define in a way that is both meaningful and consistent across countries. Generally such schemes can be viewed as the cash income component of "Social Assistance" which is broader in that it may include housing subsidies, one-off grants for the purchase of necessary durables, as well social care and other so-called "social reintegration" services including employment support. As pointed out by Adema (2006) comparing spending on social assistance across countries is fraught with difficulties. The same applies to the cash component. The following issues need to be addressed for people of working age:

- In some countries (e.g. in France and Germany), the assistance component of unemployment protection operates in an intermediate stage between receipt of unemployment insurance benefits and general social assistance. This contrasts with other cases where the MI operates as an unemployment assistance benefit.

- MI benefits are often complemented by separate means-tested housing benefits, which make up an important component of the income package. Elsewhere, e.g. in Germany, Estonia, the Netherlands and Poland, the MI scheme itself is intended to cover housing assistance. Accounting for such payments can make a large difference.

- In some cases, additional benefits are "passported", i.e. eligibility is automatic when in receipt of MI. These benefits may be in cash or in kind (e.g. free school meals in the UK). In other countries the equivalent additions are an integral part of MI.

- Sometimes the MI scheme is particularly intended to cover the needs of some family members (e.g. adults), whereas the needs of other members (e.g. children) are addressed by other benefits. For example, in the UK the means-tested Child Tax Credit complements the MI scheme for families with children. This is in contrast with the situation in many countries, where the MI payment is intended to cover the basic needs of all family/household members.

In our analysis we consider none of the possible extra additions alluded to above and narrow the scope to those benefits listed as "Minimum resources: general non-contributory minimum" in the Mutual Information System on Social Protection (MISSOC) database.[2] The specific schemes for the countries we consider are listed in table A1 in appendix 1 and their main characteristics are summarised for all EU27 in table A2 in appendix 1.

MI schemes as defined in our analysis involve a level of MI that varies by personal and assessment unit characteristics in a way that is associated with assessed need. They tend to be benefits of last resort where entitlement is contingent on the exhaustion of all other benefits although they may "top up" other incomes to the required level. Generally, MI schemes require able-bodied recipients to participate in work search, training or social integration programmes. However, the schemes vary considerably in terms of the eligibility requirements related to age and residence and the existences and size of income disregards, e.g. for earnings from employment, capital or maintenance payments. As discussed above they also differ in their treatment of family and housing needs and also their

[2] http://ec.europa.eu/employment_social/spsi/missoc_en.htm

tax treatment, as well as the definition of the unit of assessment; whether MI entitlement is assessed on the needs, income and work capability of an individual, the benefit unit or the household.

Perhaps the most fundamental difference between MI schemes across EU countries (noting that in some countries such as Greece and Hungary no such scheme exists) is the determination of the level of benefit. While some countries have set their levels of MI in relative terms, e.g. in relation to the minimum wage or other benefits such as basic pensions, others have set benefit levels in absolute terms, i.e. based on an assessment of the cost of a range of needs such as food, clothing and participation in social life. As shown below, in section 7, these different approaches, as well as varying political priorities have resulted in income levels of social protection programs that vary considerably, relative to national median incomes.

By adopting the MISSOC narrow definition of MI, in many respects we do not compare equivalent benefit packages in each country. Nevertheless this approach allows us to focus, in a cross-country perspective, on a specific kind of benefit which often receives attention in policy circles. An alternative approach would be to include the effects of a wider range of benefits intended to contribute to MI levels. But this too would raise issues of scope and comparability. Should in-work benefits be included? Should universal benefits (e.g. child benefits in some countries) be included where these form part of the income support package for those unable to support themselves? We return to this issue in section 8.

# III. Data and methods

## EUROMOD

EUROMOD is a unique tax-benefit microsimulation model, covering countries of the EU in a comparable manner. It uses micro-data derived from representative national income surveys, as shown in table A3 in the appendix 1 for the countries covered in this paper. It simulates direct tax liabilities, social insurance contributions and cash benefit entitlements for the households and their members on the basis of the tax-benefit rules in place in each country. Policy instruments that are not simulated are taken directly from the data, as are original incomes.

Our analysis covers 18 countries: Belgium, Denmark, Germany, Estonia, Greece, Spain, France, Italy, Luxembourg, Hungary, the Netherlands, Austria, Poland, Portugal, Slovenia, Finland, Sweden and the UK. The tax-benefit systems simulated refer to different years in different countries, ranging from 2001 to 2005 (see table A3). In most cases, the input datasets of household circumstances refer to a period a few years prior to the policy year, and the original incomes derived from them are updated to this date. This process relies on indexing each income component (which is not simulated) by appropriate growth factors, based on actual changes over the relevant period.[3] In general, no adjustment is made for changes in population composition. EUROMOD is a static model, appropriate for the analysis of short-term effects (Sutherland, 2007; Lietz and Mantovani, 2007).[4]

Table A3 shows the sample size (number of households) in each input dataset. This varies from around 3,000 households for the smaller countries to well over 25,000 in Poland and the UK. It should be noted that once the analysis focuses on working age people in poverty and those entitled to MI, the sample size in terms of number of individuals can become very

[3] This process is documented in EUROMOD Country Reports, see: http://www.iser.essex.ac.uk/research/euromod/documentation/country-reports

[4] The version of EUROMOD used in this paper is F2.

small. Thus the differences between countries that we find may not be statistically significant.

## Simulating Minimum Income scheme entitlements

In the case of the MI benefits that are considered here not all the conditions of entitlement are possible to simulate. For example, information on citizenship and availability for work is not always available. Furthermore, asset tests which affect eligibility to some MI schemes are not included except in cases where the information on assets is considered to be relatively reliable and where asset tests might be critical, as in the UK.[5] Thus, in establishing eligibility, EUROMOD tends to be more "generous" or permissive than the rules are in practice. Furthermore, the discretion that operates at the local level in some systems is not possible to represent in our calculations.[6]

Moreover, our estimates do not take account any non take-up of benefit entitlements. It is assumed that the legal rules are universally respected and that the costs of compliance are zero. This can result in the overestimation of benefits actually received and is likely to apply particularly to MI benefits. Usually such benefits have to be applied for and the costs of claiming may be considerable; and not all those who would be entitled may be aware of the benefit or their possible entitlement. Furthermore, receipt of MI benefits may be considered by potential claimants to be stigmatising (Matsaganis et al., 2008).

By using a microsimulation approach is, in principle, possible to model the non-take-up behaviour of the individuals and this would allow us to capture a potentially important component of lack of coverage by MI benefits. However, here we adopt the assumption of full take-up because too little is known about take-up of benefits in many of the countries considered. To account for it in some countries where more is known such as the UK (DWP, 2007) and Germany (Frick and Groh-Samberg, 2007) and not others would reduce cross-country comparability (Matsaganis et al., 2009). To assume similar patterns of non take-up in the latter group of countries as in the former group would risk biasing the results as take-up tends to follow particular patterns which are specific to the benefit and institutional arrangements in the country in question. Factors that are likely to have an impact on take-up rates are the level of stigma involved in claiming MI and, linked to that, the stringency and extent of the means-test; the size of the MI entitlement relative to the potential claimant's other income and needs and whether MI receipt gives access to other passported benefits. As they stand our results can be interpreted as demonstrating the intended effects of benefits and can generally be considered as providing an upper bound on the effectiveness of such benefits in protecting working age people from poverty.[7]

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[5] In fact, in the UK very few working age people who might otherwise qualify for MI have sufficient assets to make a difference, whereas this is not the case for the elderly). It is likely that in most cases assets tests would not make much difference to the groups we consider in this study.

[6] It is worth noting that Hungary and Greece have no general MI scheme. They are retained in our analysis, nevertheless. Moreover, it is not possible to simulate the MI schemes of Spain and Italy as they are administered at a regional rather than national level and as the variations between the regions are too great. Instead for those two countries the MI receipt information collected in the national surveys is used.

[7] There are three exceptions. In Italy and Spain information on MI receipt is taken directly from the data. The estimates may be affected by survey under- and mis- reporting but will capture non take-up. In the case of Poland MI entitlement has been calibrated to take account of the fact that only 7 per cent of the portion of the MI payment made by local authorities (70 per cent of the total) is actually paid. The calibration assumes that everyone entitled receives a lower amount, rather than some entitled people receiving the full amount and others none. In our analysis this will result in an over-estimate of coverage and an under-estimate of adequacy. These differences in treatment should be borne in mind in interpreting the results that follow.

## EUROMOD versus other methods

In summary, the advantages of using EUROMOD to analyse the effects of MI benefits are:

- Coverage of the full range of relevant individual and household circumstances in the correct proportions
- Identification of each MI benefit separately
- Correct identification of the relevant MI assessment unit for each working age person
- The capacity to simulate illustrative changes to the MI scheme
- Comparability of approach across countries and the fact that estimates are generally an upper bound on the likely actual effects of MI schemes.

Previous comparative studies on the effects of MI benefits have tended to rely on comparisons of the effects on stylised households (or "model families") (Adema, 2006; Eardley et al., 1996). While such analysis has many advantages, including transparency and no limitations due to lack of information in micro-data, it also has its own limitations on which analysis based on representative data can improve. In particular, analysis using EUROMOD allows the full range of individual and household circumstances to be captured, with the cross-national variation in prevalence of each set of circumstances being reflected in the analysis (Marlier et al., 2007; section 4.2).

Survey data can also be analysed directly but MI schemes are not always identified individually within cross-national datasets. For example, the EU-SILC UDB contains a variable (HY060 Social exclusion benefits, not otherwise classified) which contains the MI benefits addressed in this paper. However, in some countries other benefits are included in the same aggregate variable: the Working Tax Credit in the UK is an example.

Furthermore, in EU-SILC the variable is defined at the household level. This is a potentially serious limitation in the countries where the assessment unit for MI is a narrower unit: potentially a household receives more than one MI entitlement, if there is more than one assessment unit. In understanding why a particular working aged individual is, or is not, entitled to MI it is important to establish the characteristics of their MI assessment unit. It is also of interest to establish to what extent MI income from outside the assessment unit but within the household is in fact, under a household income sharing assumption, supporting the person in question. EUROMOD simulates MI entitlements using the correct assessment unit; the analysis below makes use of the feature.

Finally, while the direct analysis of survey data has the apparent advantage of taking account of non take-up, because those not taking up do not report receipt, this does not fully resolve the issue. First of all, measurement error in the surveys can lead to underestimation of the extent of receipt (Figari et al., 2009). Secondly, in attempting to establish the extent of gaps in coverage of MI schemes such analysis cannot distinguish between non take-up on the one hand and lack of entitlement on the other. Assuming full take-up allows us to identify the extent of non-entitlement among poor and very poor households. Both types of holes in safety nets are important for policy to address, but the solutions are different and the two problems need to be distinguished. This analysis focuses on the extent and incidence of non-entitlement.

In addition, the capacity of EUROMOD to simulate changes in policy rules allows us to explore what would happen to incomes in the absence of the MI scheme. In some countries the effect would be the same as simply deducting MI income from disposable income. But in

others, other means-tested benefit entitlements (housing benefits and rent subsidies, in particular) would rise to fill, or partly fill, the gap left by the MI income. In these cases the MI benefits are not the benefits of last resort. Furthermore, in other cases, loss of MI results in additional losses of income because of the "passporting" of other benefits, conditional only on receipt of MI. Moreover, in some countries MI schemes are subject to social contributions and income tax (Denmark and the Netherlands), which might have an effect on the final disposable income of the MI recipients. EUROMOD allows us to capture all the interactions between MI schemes and other components of the tax-benefit system.

And finally, by simulating illustrative "reforms" to MI benefits we can use EUROMOD to explore how measures of coverage and adequacy respond to changes in the conditionality and level of the MI.

A comparison of EUROMOD-estimated total MI receipt with national statistics on the cost of these schemes shows them to be broadly consistent in size. While there may be specific reasons in some countries for the estimates differ (e.g. if the national statistics in fact relates to a broader concept of MI or social assistance) we can identify a few generally-applicable explanations for divergence between EUROMOD estimates and those derived from national administrative data. First, as discussed above, EUROMOD assumes full take-up of MI benefits and does not capture all the conditions applied in practice, which would explain lead to over-estimation of the size and effects of MI. However, it also assumes full take-up of other benefits to which MI operates as a top-up. Thus if these other benefits are over-estimated, MI entitlement will tend to be under-estimated.[8] Underestimation can also be explained in part by the under-representation of people on low incomes in the surveys used as input into EUROMOD (Mantovani and Sutherland, 2003). Finally, in most countries our simulations of MI entitlement are based on incomes received in the previous year. In many, although not all, countries entitlement is in practice calculated on the basis of incomes received in a much shorter period such as a month. To the extent that incomes vary over the year, this will lead to EUROMOD not capturing some entitlements, and hence under-estimating total receipt. Generally we might expect all of these factors to apply to some extent in each country, with the net effect depending on the strength of each factor.

## Sample of interest

We focus on working aged individuals and the households in which they live. "Working age" is defined as being aged 16 to 64 (inclusive), excluding people in current full-time education. Table 1 and figure 1 provide some background information about the sample. Table 1 below shows what proportion of the whole national populations is made up of people in this age group. In fact, this proportion is quite similar in most countries ranging from 55 per cent in Belgium to 62 per cent in Spain. When looking at the proportion of this sub-sample that are in work (defined as having positive gross earnings or self-employment income), which is relevant to whether they are likely to be entitled to MI, more variation between countries can be observed. While in Greece, the UK and Slovenia around 65 per cent of working age adults are in work and in Poland only 58 per cent, this proportion is nearly 90 per cent in Sweden and Finland.

[8] This applies particularly in the case of Ireland which is therefore not included in this analysis.

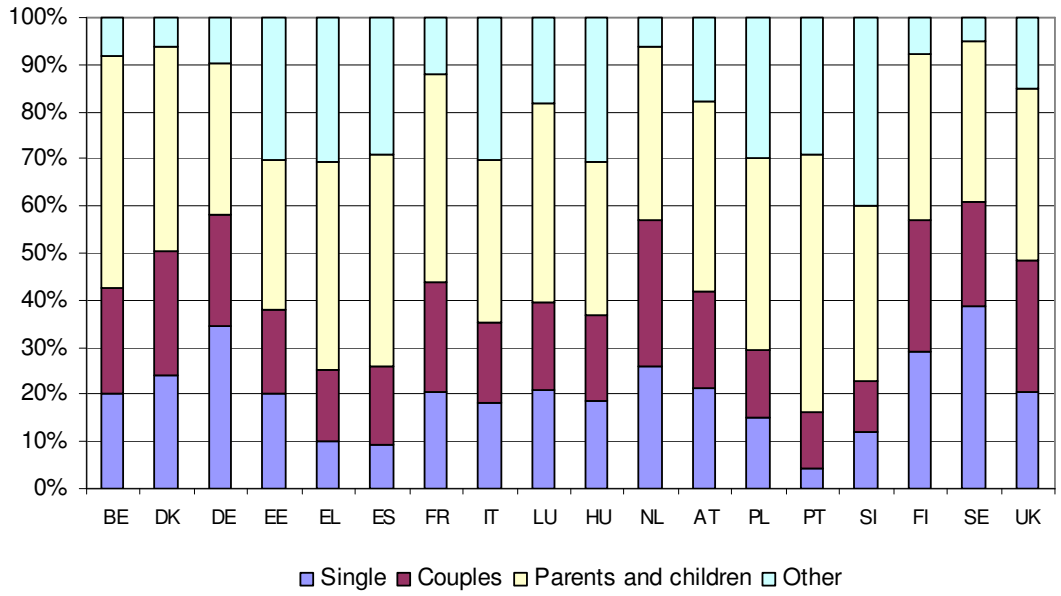
**Table 1: Samples of working age individuals: characteristics**

| | Percentage of population | Percentage of working age individuals with positive earnings |
|---|---|---|
| Belgium | 55% | 73% |
| Denmark | 58% | 83% |
| Germany | 61% | 79% |
| Estonia | 58% | 69% |
| Greece | 56% | 65% |
| Spain | 62% | 70% |
| France | 56% | 76% |
| Italy | 61% | 70% |
| Luxembourg | 60% | 71% |
| Hungary | 61% | 72% |
| Netherlands | 61% | 79% |
| Austria | 60% | 71% |
| Poland | 59% | 58% |
| Portugal | 60% | 73% |
| Slovenia | 61% | 65% |
| Finland | 58% | 88% |
| Sweden | 57% | 89% |
| UK | 61% | 66% |

Notes: Figures refer to various years 2001-05 (see Table A3 in appendix 1). "Working age" is defined as being aged 16 to 64 (inclusive), excluding people in current full-time education. Source: EUROMOD.

Figure 1 provides background statistics about the household types where working age individuals live. This is a relevant factor when considering the effect of MI incomes on the risk of an individual being in a poor household. The income of the other household members may affect the MI entitlement but will affect he overall level of household income and risk of poverty. This distinction is important when the assessment unit for MI is not the household unit. Figure 1 therefore shows the proportion of individuals living in the four types of households: single people, couples, parent(s) and their own children and "other". The third group consists of families with at least one child aged under 16 or in full-time education. Other older children may also be present, but households containing other adults (such as parents or siblings of the working-age person) are assigned to the fourth, "other" group. The motivation for this particular categorisation is to identify groups for whom MI receipt and poverty risk might be expected to be directly related (single people and, usually, couples); and those where there are likely to be more than one MI assessment unit (the "other" group). This is also the group likely to contain people aged 65+ and often subject to different MI regimes.

**Figure 1 Individuals of working age by household type**




Notes: Figures refer to various years 2001-05 (see Table A3 in appendix 1). "Working age" is defined as being aged 16 to 64 (inclusive), excluding people in current full-time education. "Couples" are partners living together (married or unmarried). "Parents and children" consist of families with at least one child aged under 16 or in full-time education. Other older children may also be present, but households containing other adults (such as parents or siblings of the working-age person) are assigned to the fourth, "other" group. Source: EUROMOD.

Figure 1 suggests that while there is considerable variation in the proportion of individuals living in different household types across countries, generally the greatest variation is in the extent to which working age people live in households of the "other" category. In the Scandinavian countries as well as Germany, the Netherlands and the UK, the proportion of working age people in households containing just working age adults is much higher than in the Southern and Eastern European countries. In those countries, the 'other' households make up a substantial proportion of the total. In other words, the extent of sharing within households with others who might be independently assessed for MI benefits differs considerably between countries.

As a final piece of background we present poverty rates, as estimated by EUROMOD, for working age people using two thresholds: 60 per cent and 40 per cent of median household disposable income. Starting with the poverty threshold at 60 per cent of median household disposable income shown in table 2, the countries fall into distinct groups with poverty rates being substantially lower in the Scandinavian and Continental countries (usually between seven and nine per cent) compared to the Southern and Eastern European countries where it is frequently above 15 per cent. Poverty rates are naturally much lower using a threshold of 40 per cent of median disposable income. They are as low as one or two per cent in most of the Scandinavian and Continental countries with Belgium being an exception. For the Southern and Eastern European countries the poverty rates also drop substantially when using the 40 per cent threshold, to 5 to 7 per cent.

**Table 2: Poverty rates for working age people**

| | Poverty threshold | |
|---|---|---|
| | **60% median** | **40% median** |
| Belgium | 9.0% | 3.9% |
| Denmark | 5.7% | 2.0% |
| Germany | 10.9% | 2.4% |
| Estonia | 16.7% | 6.5% |
| Greece | 15.5% | 6.6% |
| Spain | 15.1% | 6.1% |
| France | 9.1% | 1.3% |
| Italy | 15.6% | 7.2% |
| Luxembourg | 8.5% | 0.3% |
| Hungary | 15.0% | 4.6% |
| Netherlands | 10.0% | 1.7% |
| Austria | 7.5% | 1.7% |
| Poland | 16.4% | 4.5% |
| Portugal | 15.6% | 4.1% |
| Slovenia | 14.1% | 3.6% |
| Finland | 9.1% | 1.1% |
| Sweden | 6.8% | 1.4% |
| UK | 13.5% | 3.3% |

Notes: Figures refer to various years 2001-05 (see table A3 in appendix 1). "Working age" is defined as age 16 to 64 (inclusive), excluding people in full-time education. Source: EUROMOD.

The question we address in the next section is to what extent MI schemes protect working age individuals from poverty and what proportion of working age people who are measured as poor using each of these thresholds are entitled to MI: i.e. the coverage of the different MI schemes.

# IV. Coverage

The importance of MI schemes to the incomes of working age people varies considerably across the 18 countries that we consider, as shown in table 3, which shows the share of individuals of working age living in households entitled to MI, based on EUROMOD simulations. Overall, across the countries we consider, 5 per cent of working age people are in households entitled to some MI payment. The rate is much larger in the UK (17 per cent) and Finland (14 per cent) and is larger than average in Belgium, Sweden, France and Slovenia. As explained above it is zero in two countries with no generalised MI scheme (Hungary and Greece) and also very low (less than 2 per cent) in Austria, Italy and Spain. Of course, as explained above, these estimates of numbers with entitlement may differ somewhat from those obtainable from administrative statistics on actual receipt because we do not capture the effects of non take-up, local discretion and some MI eligibility conditions, and are using annual income to simulate entitlement.

The table also shows, for countries where the MI assessment unit is not the household, the proportion of individuals of working age living in MI assessment units entitled to MI. The rate of individuals entitled to MI is always smaller when considering the narrower unit because in

some cases working age individuals live in MI assessment unit not entitled to MI sharing the same household with other MI assessment unit entitled to the MI. In some countries, particularly Finland, Denmark, France, the Netherlands, Sweden and the UK, a sizeable proportion of working age people are in assessment units not entitled to MI, while living in households where someone else is entitled. This is indicated by the difference in the figures in the two columns of table 3 and is relevant to our analysis of the extent to which working age people with income below the poverty threshold are "entitled to" MI. Interestingly the countries where this makes a difference are not those with high proportions of multi-unit households (figure 1) but rather reflects the design of MI schemes in countries where multi-unit households are less likely to be the norm.

**Table 3: Percentage of working age individuals in households/assessment units entitled to Minimum Income**

| Country | Household | Assessment Unit |
|---|---|---|
| Belgium | 12.2% | ~ |
| Denmark | 2.6% | 1.5% |
| Germany | 2.9% | 2.8% |
| Estonia | 5.7% | ~ |
| Greece | n/a | n/a |
| Spain | 0.7% | 0.6% |
| France | 6.1% | 4.4% |
| Italy | 1.1% | ~ |
| Luxembourg | 5.8% | 5.8% |
| Hungary | n/a | n/a |
| Netherlands | 4.6% | 3.6% |
| Austria | 1.4% | 1.3% |
| Poland | 16.7% | ~ |
| Portugal | 5.8% | ~ |
| Slovenia | 6.1% | ~ |
| Finland | 13.7% | 9.8% |
| Sweden | 8.2% | 5.0% |
| UK | 16.7% | 12.2% |

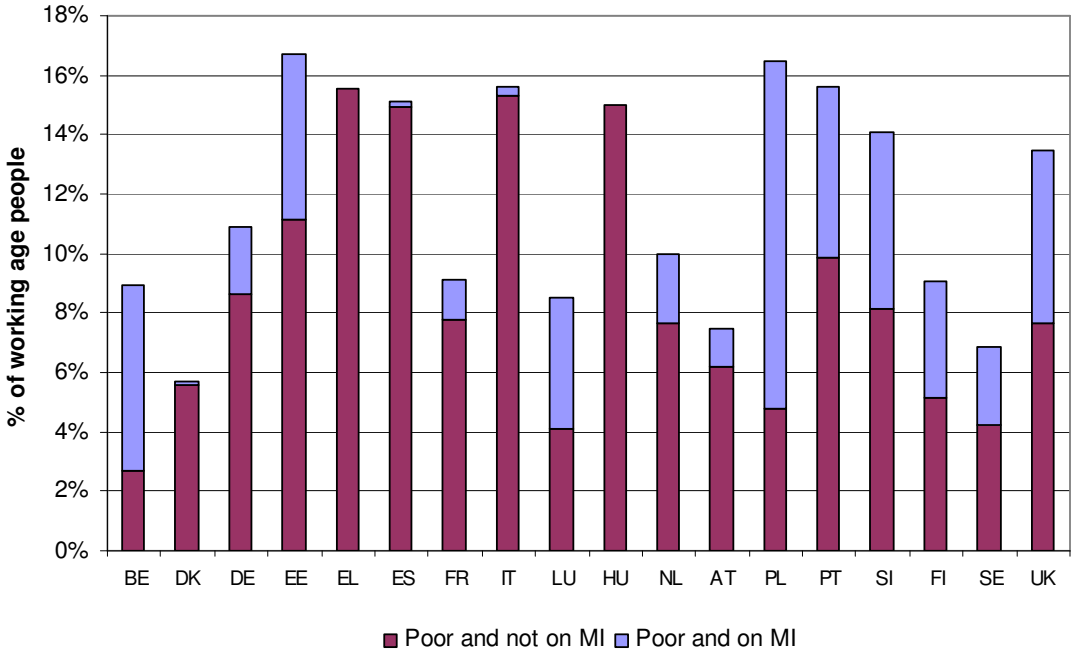
Notes: ~ indicates where the modelled assessment unit is the household (see table A1 in appendix 1). "Working age" is defined as age 16 to 64 (inclusive), excluding people in full-time education. Figures refer to various years 2001-05 (see Table A3 in appendix 1). For Spain and Italy estimates are for those recorded as receiving MI in the data. Source: EUROMOD.

One measure of MI coverage is the extent to which working age people living in poverty are in assessment units entitled to MI benefits. This is shown for different countries in figure 2. Coverage in this case is expressed for each country as the ratio between the paler section of the bar and the bar as a whole. Figure 2 demonstrates that while in Denmark only 3 per cent of those in poverty are entitled to MI benefits, this increases to around 70 per cent in the case of Belgium and Poland. Measured in this way coverage is also low in France (15 per cent), Austria (17 per cent), the Netherlands (24 per cent) and Germany (20 per cent).[9] Countries in which relatively large proportions of those living in poverty are receiving MI benefits in addition to Poland and Belgium are Eastern European countries such as Slovenia

[9] The reason for non-entitlement being so high in four countries is that MI schemes either do not exist (as in Hungary and Greece) or exist in a small form only in some regions (as in Italy and Spain).

(42 per cent) and Estonia (34 per cent), as well as Portugal (37 per cent), the UK (43 per cent), Finland (44 per cent) and Luxembourg (52 per cent). Lack of entitlement can either be due to gaps in the coverage of MI schemes, or due to the fact that the threshold for entitlement is set below the poverty line of 60 per cent of median income.

**Figure 2: Working age individuals below the poverty line (at 60 per cent of median) by Minimum Income entitlement status**




Figures refer to various years 2001-05 (see table A3 in appendix 1). Working age individuals on MI are individuals (aged 16 to 64 (inclusive), excluding people in current full-time education), living in an assessment unit (see table A1 in appendix 1) entitled to MI. The sample size of working age individuals below the poverty line entitled to MI is small in DK, ES and AT. The results should be treated with caution. Source: EUROMOD.

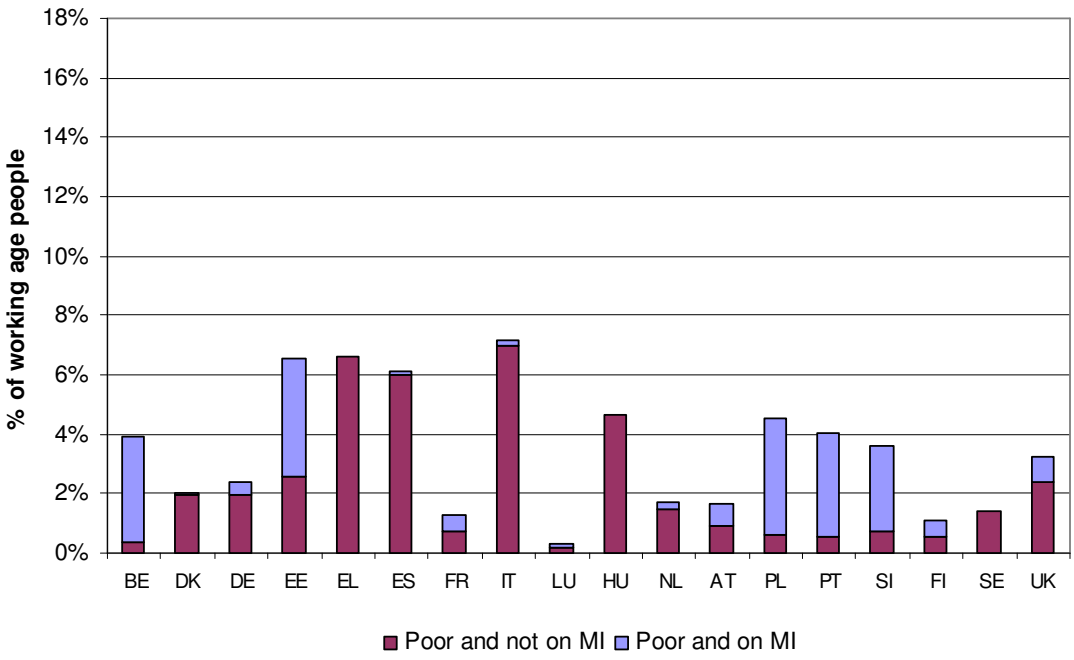
In fact, the main explanation for the large proportions of poor non-entitled is that most MI levels of income are lower than the 60 per cent median income threshold. With a lower threshold, such as 40 per cent of median, we would expect to see not only fewer poor (as in table 2) but also a higher proportion of entitled people. Figure 3, which is again based on entitlement at the MI assessment unit level, shows that this is indeed the case.

Except where MI schemes are regional or non-existent (Greece, Hungary, Italy and Spain) most countries have schemes that appear to be more successful at covering those under 40 per cent of the median than those under the 60 per cent threshold. The target group is small, with low poverty rates (under 2 per cent) in Finland, France, Denmark, Luxembourg and Sweden. Of the remaining countries, sizeable proportions of the poor are entitled to MI. This is so in Slovenia, Belgium, Poland, Portugal and Estonia. This suggests that for some groups of working age people in these countries MI levels of income are very low: not sufficient to bring them to 40 per cent of median income: raising the issue of adequacy of the MI schemes, considered in the next section, rather than their coverage.[10] There are also sizeable groups who are poor using this low threshold but still not on MI in Germany, the UK,

[10] It is also possible that household members not in the MI assessment unit and for some reason not entitled to MI themselves are lowering equivalised income below the level it would be for the MI assessment unit alone.

Estonia, Poland, Denmark and the Netherlands. This suggests either gaps in coverage, or else that the MI level is so low that some households below 40 per cent median income can still be not entitled.

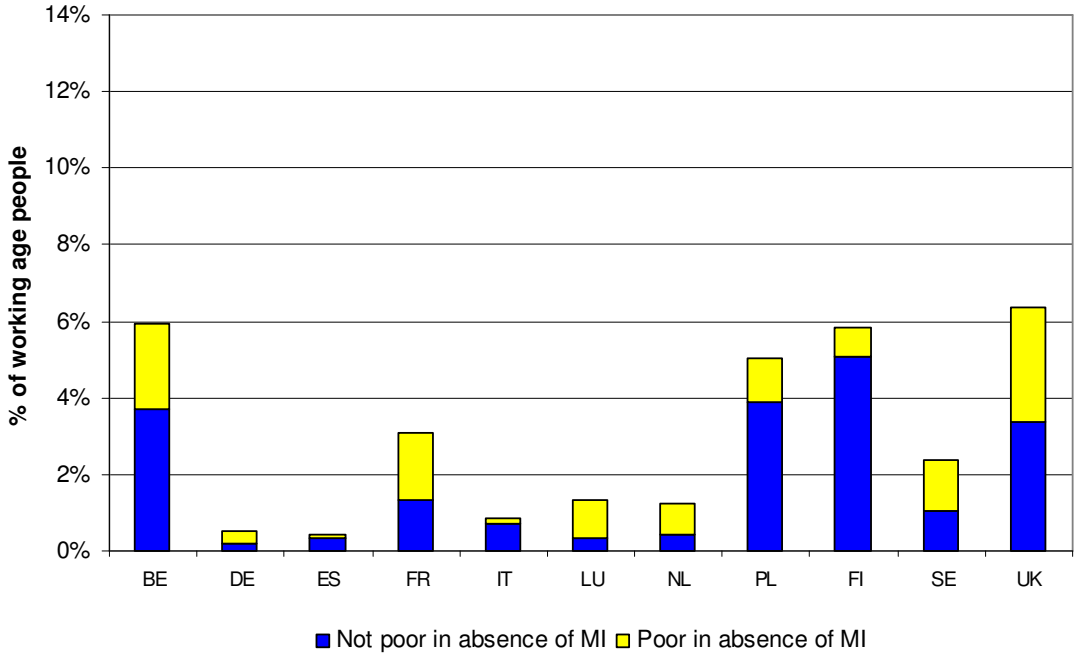
**Figure 3: Working age individuals below the poverty line (at 40 per cent of median) by Minimum Income entitlement status**




Note: Figures refer to various years 2001-05 (see table A3 in appendix 1). Working age individuals on MI are individuals (aged 16 to 64 (inclusive), excluding people in current full-time education), living in assessment unit (see table A1 in appendix 1) entitled to MI. The sample size of working age individuals below the poverty line entitled to MI is small in DK, DE, ES, FR, IT, LU, NL, AT and SE. The results should be treated with caution. Source: EUROMOD

Another aspect of MI schemes related to coverage is whether recipients would be poor if they did not receive MI. In other words, moving beyond the question of whether MI schemes cover all those in need to whether they are claimed by people who would not be poor without them. Looking across the different countries taking 60 per cent of median disposable income as poverty line, figure 4 shows that this only applies in a small number of countries, mainly, Belgium, France and the UK. The dark section of the bars identifies those recipients of MI schemes who would not fall below the 60 per cent poverty line if they did not receive MI benefits. In contrast, the paler sections of the bars identify those recipients of MI schemes who would be in poverty without those benefits. The phenomenon of recipients of MI schemes who would not be in poverty without those benefits could be due to a range of factors such as difference between OECD modified equivalence scale (used to derive the equivalised income on which the poverty line is based on) and "implicit equivalence scale" of the MI schemes, and in particular that additional needs (e.g. disability) are present and taken into account in the benefit but not in the equivalence scale. Also, as discussed above the assessment unit of the MI scheme may be different from the household which is the income assessment unit for poverty measures, and, finally, the MI may not be exclusively intended to be targeted at the "poor" as identified by the monetary income.

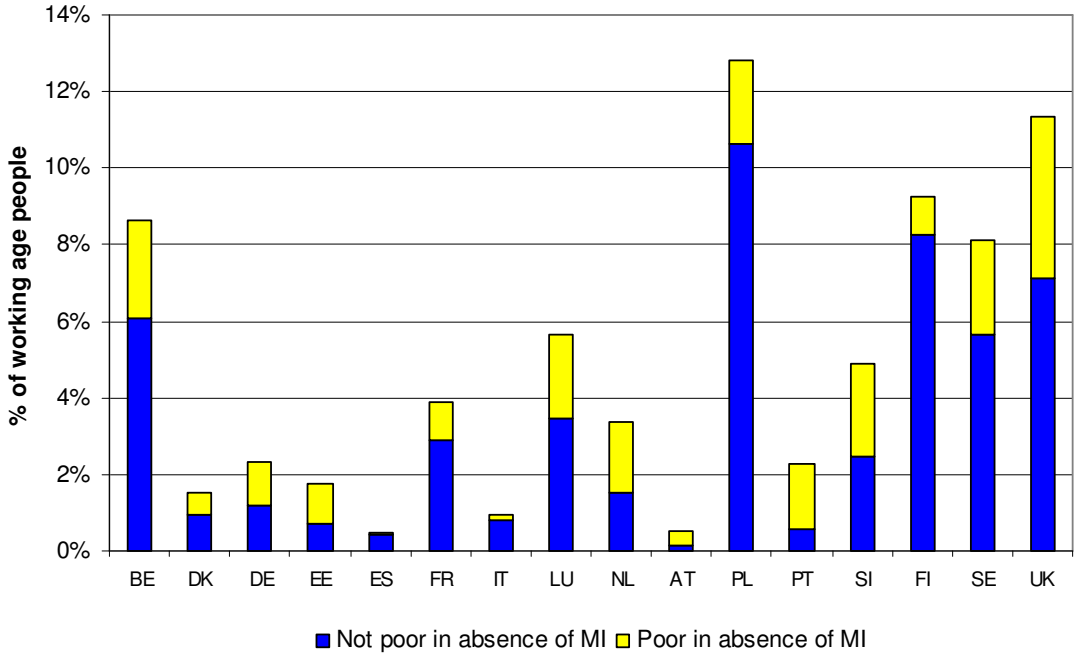
**Figure 4: Working age people entitled to Minimum Income above the poverty line (at 60 per cent of median) by whether poor in absence of Minimum Income**




Note: Figures refer to various years 2001-05 (see Table A3 in appendix 1). Working age individuals on MI are individuals (aged 16 to 64 (inclusive), excluding people in current full-time education), living in assessment unit (see table A1 in appendix 1) entitled to MI. The sample size of working age individuals above the poverty line entitled to MI is small in AT, DK,.DE, EE, EL, ES, HU, LU, NL, PT and SI. DK, EE, EL, HU, AT, PT and SI have been dropped while the results should be treated with caution for the remaining countries. Source: EUROMOD

Figure 4 shows the countries in which MI entitlement among those of working age is relatively common (more than 3 per cent of the working age population) in households with income above the 60 per cent poverty threshold: Belgium, France, Poland, Finland, Sweden and the UK. Using the lower 40 per cent poverty threshold, as in Figure 5, naturally increases the proportions of people above the poverty threshold. MI schemes prevent non-negligible proportions of working aged people from falling into poverty using the 40 per cent threshold in Poland, the UK, Slovenia Sweden, Belgium and Luxembourg (as indicated by the pale sections of the bars). But at this low level of poverty threshold, many MI recipients would stay above the threshold without this source of income, as shown by the dark sections of the bars. This indicates that other sources of income are protecting them from falling into poverty.

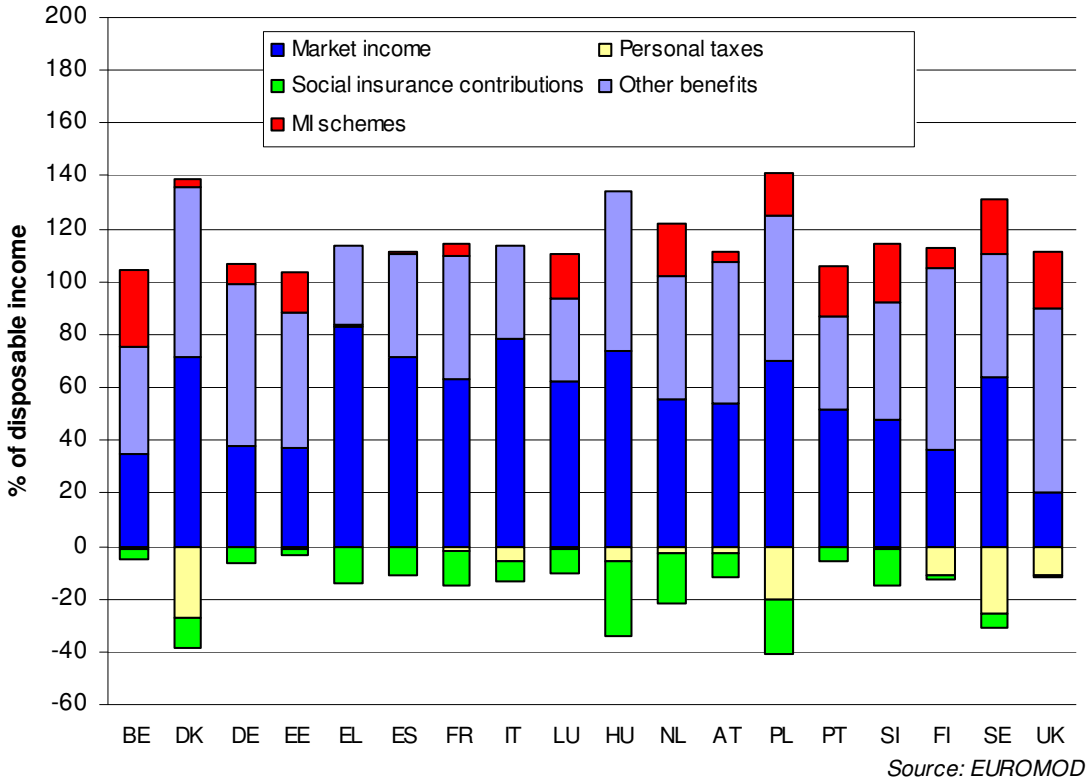
**Figure 5: Working age recipients of Minimum Income above the poverty line (at 40 per cent of median) by whether poor in absence of Minimum Income**




Note: Figures refer to various years 2001-05 (see table A3 in appendix 1). Working age individuals on MI are individuals (aged 16 to 64 (inclusive), excluding people in current full-time education), living in assessment unit (see table A1 in appendix 1) entitled to MI. The sample size of working age individuals above the poverty line entitled to MI is small in AT, DK, EE, EL, ES, IT and HU. EL and HU have been dropped while the results should be treated with caution for the remaining countries. The results should be treated with caution. Source: EUROMOD

In order to examine this further, a breakdown of the income composition of households with at least one working age individual, in the poorest 10 per cent of household income distribution, is shown below. The red part of the bars refers to the MI schemes and it is clear that MI schemes in fact only constitute a small proportion of the overall household income in most countries. The proportion is largest in Belgium, the Netherlands, Poland, Sweden and the UK where they make up at least 20 per cent of disposable income, on average, for the lowest income households containing working age people. However, it is clear that an analysis of the income package as a whole, particularly for people not entitled to MI, might help in understanding how benefit payments can protect working age people from poverty. The most important income component besides market income is “other benefits”. A breakdown of those benefits is included in appendix 1 (table A3) and suggests that in many countries old age benefits are a substantial part of the benefits received by the poorest households (by definition not received by working age people themselves) followed by unemployment and family benefits, though this varies between countries.

**Figure 6: Components of disposable income of households with working age individuals in the poorest 10 per cent of the population**




Note: Figures refer to various years 2001-05. "Working age" is defined as being aged 16 to 64 (inclusive), excluding people in current full-time education. Decile groups are based on equivalised household disposable income including the whole population. Source: EUROMOD.

# V. Targeting and adequacy of MI schemes

Generally, MI incomes fall short of the 60 per cent threshold. In this section we compare the adequacy of MI schemes in terms of how far short of the 60 per cent poverty threshold is the average level of income of working age people when entitled to MI. Thus we assess the adequacy of MI income levels using the so called 'poverty gap'.

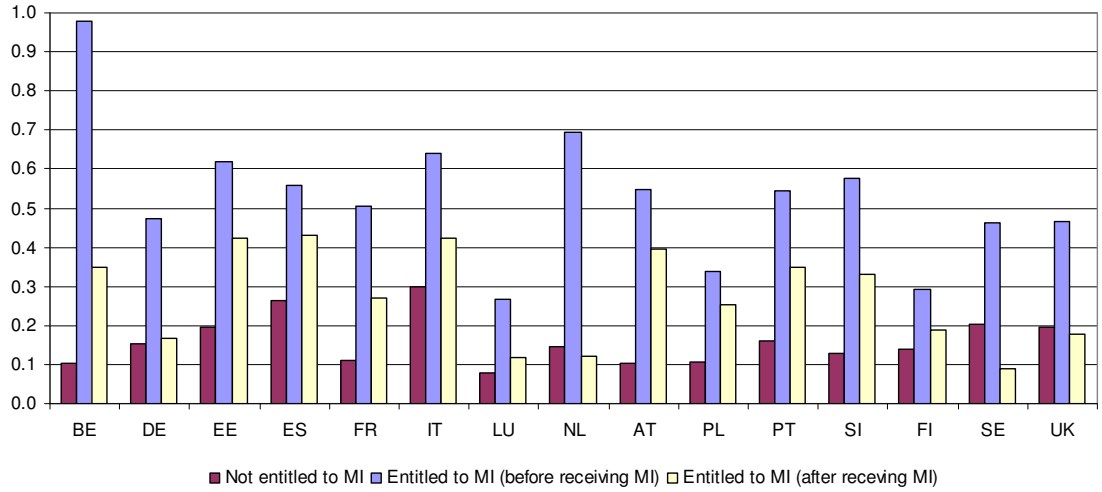
The poverty gap measures the distance between the household equivalised income and the poverty line, expressed as a proportion of the poverty line. If the result is close to zero, this means that initial income is close to the poverty threshold and, for present purposes, the income is close to adequate. If the result is close to 1 this indicates that income is close to zero.

Figure 7 compares the median poverty gap for working age individuals who are living below the 60 per cent poverty threshold for those who are, and are not, entitled to MI.[11] It shows the gap for those entitled in two ways: before receiving MI and after receiving it.

[11] As well as Hungary and Greece, which do not have MI schemes, Denmark is also omitted from this analysis due to small sample size.

First, by comparing the gap for those who are not entitled to MI (dark bars) to the gap for those who are entitled, before receiving MI (medium-shaded bars) we can establish to what extent those schemes are targeted on the working aged people in the poorest households. In every country the gap is on average larger in the latter case. The difference in the height of the first two bars for each country indicates how focussed is the income targeting and. Figure 7 suggests that MI schemes are on average effective in all countries at targeting the poorest working aged people.

**Figure 7: Median poverty gap of working age individuals below the poverty line (at 60 per cent of median) by MI entitlement status (before and after receiving MI)**




Note: Figures refer to various years 2001-05. Working age individuals on MI are individuals (aged 16 to 64 (inclusive), excluding people in current full-time education), living in assessment unit (see table A1 in appendix 1) entitled to MI. The sample size of working age individuals below the poverty line entitled to MI is small in DK, ES and AT. DK has been dropped while the results should be treated with caution for the remaining countries. Source: EUROMOD

Secondly, by comparing the second and third bars for each country we can see that receipt of MI for those entitled makes a substantial difference to the poverty gap, and to the adequacy of incomes. The effect is particularly strong in Belgium, the Netherlands and Sweden and relatively small in Spain, Estonia, Austria, Poland and Finland.

Comparing the poverty gap for those not entitled to MI with that for those entitled when in receipt MI (the first and third bars for each country) shows that in three countries, the Netherlands, the UK and especially Sweden, the gap is smaller for those on MI than those not entitled. For these cases this suggests that on average working age people with household incomes below the poverty line are better off if they are entitled to MI than if they are not, implying that they key issue for MI in these countries may relate to coverage rather than adequacy of the schemes. For the remaining countries the opposite is the case: working age people on MI have incomes that are on average less adequate (in relation to the 60 per cent poverty threshold) than the incomes of people not entitled to MI. This suggests that the key issue in these countries relates to adequacy: the income levels guaranteed by the MI schemes are far below the 60 per cent poverty threshold and those not entitled are in this position because, on average, their incomes are too high.[12]

[12] The poverty gap analysis is repeated for the 40 per cent poverty line in figures A1 and A2 in appendix 1.

# VI. Work Incentives

The generosity of minimum income schemes is not simply a matter of political preference. In practice, the level of the income guarantee is constrained by (i) fiscal considerations, but also (ii) labour market conditions.

The former is almost self-explanatory: there is little need to elaborate on the fiscal constraints on improvements to minimum income schemes, especially at a time of financial and economic crisis, except perhaps to note that, as demonstrated in an empirical exercise in the next section, increasing the level of the income guarantee by x per cent is likely to cause expenditure on the scheme to rise by significantly more than x per cent, depending on the density and exact shape of the income distribution around the minimum income threshold.

The latter deserves a bit more attention. Social protection programmes, in order to be effective in pursuing redistribution objectives, need to go with the grain of economic efficiency, rather than against it. In the case of minimum income schemes, this translates to the requirement that work incentives must be preserved to the greatest possible extent. In other words, minimum income schemes must be carefully designed in order to avoid creating unemployment traps. Such traps are bound to arise when entry or re-entry wages are so low relative to the level of the income guarantee (or, conversely, when minimum income schemes are so generous relative to entry or re-entry wages) that recipients are better off staying on benefit rather than working. Are work incentives harmed and unemployment traps likely to arise as a result of guaranteed minimum income programmes as they actually operate in EU countries?

Moreover, the extent to which people who are in work and in receipt of MI are trapped in low wage (or part-time) employment because of high marginal effective tax rates (METRs) due to the combined effects of benefit withdrawal and tax deductions, is also relevant. How do MI schemes contribute to the poverty trap and create barriers to escaping low income through increasing income from work?

There two ways to answer these questions. A full evaluation of work incentives requires an estimation of replacement rates or participation tax rates on the one hand and marginal effective tax rates on the other, and their distribution in the relevant population, taking into account all the components of the tax-benefit system, i.e. income taxes, social contributions, social benefits (including unemployment and in-work benefits), benefit withdrawal rates, income disregards under the minimum income programme etc. Such an evaluation could be done with a tax-benefit model like EUROMOD and this represents a potential further development of this analysis, for countries where sample sizes of working age individuals entitled to MI allow us to derive robust estimates.

A preliminary partial evaluation of the incentive to work can be provided by looking at the relation between the maximum value of MI and the level of the statutory minimum wage (where it exists), assuming that as MI recipients move from inactivity to paid employment they substitute benefit at the maximum level under the MI scheme for labour market earnings at the minimum wage. It is this approach that is taken for the purposes of this research note. Table 4 compares the level of MI payment as calculated by EUROMOD for a single person, assuming they have no other sources of income, relative to income from the statutory minimum wage for a full time worker (before any tax or employee contributions are deducted and not including any in-work benefits to which such a worker may be entitled). The level of income on the MI schemes varies from 28 per cent in Estonia to 74 per cent in

Luxembourg.[13] No statutory minimum wage exists in five of the countries considered and a second comparison is made with the level of median disposable household income (as calculated by EUROMOD). Levels of MI income vary between 20 and 30 percent of median household income for most countries, with the ratio being lower for two of the three Eastern European countries considered here (Poland and Estonia) and higher for Denmark, Luxembourg, the Netherlands and Slovenia.[14]

**Table 4: Maximum level of MI benefit as per cent of median incomes and minimum wages**

| | Maximum level of Net MI benefit for a single person | | |
|---|---|---|---|
| | € pcm | as % of median income | as % of minimum wage |
| Belgium | 389 | 28% | 33% |
| Denmark | 737 | 46% | |
| Germany | 301 | 23% | |
| Estonia | 48 | 18% | 28% |
| France | 349 | 30% | 32% |
| Luxembourg | 1015 | 47% | 74% |
| Netherlands | 766 | 53% | 61% |
| Austria | 390 | 29% | |
| Poland | 27 | 11% | 13% |
| Portugal | 146 | 25% | 35% |
| Slovenia | 196 | 29% | 40% |
| Finland | 359 | 26% | |
| Sweden | 364 | 28% | |
| United Kingdom | 341 | 25% | 34% |

Notes: The statutory minimum wage may vary by age and sector. Moreover, allowances for seniority and dependent family members apply in several EU countries. No national statutory minimum wage exists in Austria, Cyprus, Germany, Denmark, Finland, Italy and Sweden. Sources: Eurostat for statutory minimum wages (DS-071184-table: earn_minw_cur - Monthly minimum wages - Bi-annual data); MI levels and median household incomes: EUROMOD.

A complementary analysis using information from published sources about levels of income from minimum income benefits allows comparisons like those in Table 4 to be carried out for all members of EU27 and for a common and more recent year: 2007. This is presented in table A4 in the appendix. There, as defined in the notes to the table, the definition of MI is broader than that considered in the main analysis. This shows that the maximum value level of social protection programmes for a single person varies from 20 per cent to 30 per cent of the minimum wage (for a full-time worker) in Bulgaria, Latvia, Estonia, Romania and Lithuania, to over 50 per cent of the minimum wage in Belgium, the UK, Ireland, Malta, Slovakia (where it stands at 74 per cent), and Luxembourg (75 per cent). In other words, with the exception of Luxembourg and Slovakia, the value of maximum benefit under the social protection programmes for a single person is below 60 per cent of the statutory

[13] It is 13 per cent in Poland but this low level is partly due to EUROMOD's calibration of payments of Polish MI to correspond with the level of actual payments made by local authorities. For individuals receiving full entitlements, the ratio would be higher.

[14] See Nelson (2009) for a similar analysis.

minimum wage, and below half that line (i.e. 30 per cent of the statutory minimum wage) in some of the new member states in Eastern Europe.

# VII. Hypothetical reforms and the role of MI schemes

We have seen that most MI schemes provide a level of income that is well below 60 per cent of median income for the household as a whole, for most working age people. Here, we explore the potential for hypothetical reforms increasing the maximum payment of MI to reduce the numbers of working age people below the 60 per cent poverty line, and provide an estimate of the budgetary cost of doing so. An increase of 10, 20 and 50 per cent in the level of MI payment is simulated, in turn. This is done by increasing in EUROMOD the payment amount for each person in the MI assessment unit by this percentage, including for those people not of working age who are covered by the scheme and included in our sample. The resulting net effect on the income of the assessment unit depends on whether the change in entitlement has an effect on other benefits or taxes. The effect on household income and hence poverty depends, as before, on the composition of the household relative to the assessment unit. For illustration purposes, the focus is on three countries, namely Belgium, Sweden and the UK. The aim is to show how such an increase in MI rates of payment would affect poverty rates and number of recipients and what the cost would be in the respective countries.

In each of the three simulations (an increase in MI of 10, 20 or 50 per cent), while the maximum amount of the benefit is increased by these percentages this does not necessarily result in the same percentage increase in the income of the recipients. Not only may there be consequential changes to other benefit entitlements or to tax liabilities but also newly entitled recipients will tend to have smaller entitlements. Also, as shown in table 5, the proportional increased cost of the scheme in each case exceeds the proportional increase in the payments. This is because the higher payments imply a higher income threshold for the scheme, bringing new assessment units into entitlement. The cost rises particularly steeply in the UK and least steeply in Sweden. Similarly the proportion of working age recipients increases, roughly proportionately in Sweden, at a slower rate than the payment in UK and at a steeper rate in Belgium.

In spite of these large increases in cost and number of recipients, poverty rates do not fall that fast. The poverty threshold is in these calculations fixed at 60 per cent of the median as calculated for the baseline, i.e. under status quo policies. In Sweden and the UK the reduction in working age poverty is roughly proportional to the increase in the payment. But in Belgium while the number of working age individuals in assessment units entitled to MI would almost double from 12 per cent to 23 per cent if maximum payments were increased by 50 per cent. The reduction in poverty in Belgium is one third of the baseline poverty rate while it is closer to 40 per cent in the other two countries. Thus the same relative increase in MI payment levels would have very different effects on working age poverty in the three countries. There are several potential explanations for this. For example, in the case of Belgium, the small poverty reduction could be due to the MI level being too low to lift many people above the poverty threshold, even after a 50 per cent increase. This is consistent with the high poverty gaps (relative to those in Sweden and the UK) for those receiving MI schemes, shown in figure 7.

**Table 5: Relative cost and effect of increases in MI schemes**

| Country | Baseline | Maximum benefit increased by | | |
|---|---|---|---|---|
| | | 10% | 20% | 50% |
| *No. of recipients as % of working age people* | | | | |
| BE | 12.2% | 14.1% | 16.5% | 23.4% |
| SE | 5.0% | 5.5% | 6.1% | 8.4% |
| UK | 12.2% | 12.9% | 13.4% | 14.3% |
| *Increase in cost of MI schemes relative to baseline* | | | | |
| BE | | + 16.6% | + 36.1% | + 111.4% |
| SE | | + 13.4% | + 28.1% | + 83.9% |
| UK | | + 25.3% | + 52.2% | + 139.9% |
| *Poverty rate (at 60% of median)* | | | | |
| BE | 9.0% | 8.6% | 8.3% | 6.3% |
| SE | 6.8% | 5.9% | 5.2% | 4.0% |
| UK | 13.5% | 12.4% | 11.2% | 8.4% |

Note: "Working age" is defined as being aged 16 to 64 (inclusive), excluding people in current full-time education. The cost increase relative to baseline takes into account only the additional cost for MI schemes received by households with at least one working age individual. Figures refer to various year 2001 for Sweden and year 2003 for Belgium and UK (see table A1 in Appendix 1). Source: EUROMOD.

While this simulation has only been carried out for three countries, it still gives an indication that the same hypothetical reform designed to improve the adequacy of MI levels would in practice affect different proportions of working age people, would have different cost implications and would vary in their poverty reduction effects across countries.

# VIII.Discussion

The analysis presented above represent a first attempt to explore the effectiveness of MI schemes in protecting working age people from poverty. We have identified a number of aspects that make comparing effects across countries rather challenging and here outline ways in which the analysis might be refined and improved in the future.

First of all, we use a particular, narrow definition of MI. In some countries the scheme operates in place of other benefits and covers not only the standard needs of all family members but also additional costs such as those for housing. While in other cases the MI scheme in focus only covers adults and may not include additional costs which are the focus of other benefits. An alternative approach would be to capture the whole MI package which is equivalent to identifying the level of income received by assessment units if they are eligible for MI. This would not be without its challenges: for example support for housing costs raises the issue of the quality of housing enjoyed by recipients. Nevertheless, this approach would be worth pursuing if only to check the robustness of the cross-country comparisons in the present analysis.

The second key issue is the treatment of non take-up. We have argued that our analysis (generally) provides an upper bound on the effects of MI schemes and as such has advantages over analysis that cannot distinguish lack of entitlement from lack of take-up. However, ideally, one would want to capture the effect of non take-up as well. The

microsimulation approach would allow one to do that but the necessary information is lacking in most of the countries.

Thirdly, in most countries our simulations of MI entitlement are based on incomes received in the previous year. This is a limitation imposed by the method of collection of most of the survey data on which EUROMOD relies. In many, although not all, countries entitlement is in practice calculated on the basis of incomes received in a much shorter period such as a month. To the extent that incomes vary over the year this will lead to some households being simulated to not to be entitled because their annual income places them above the threshold when they may have been entitled at different points in the year on the basis of their income in the last few months, for example. Some reduction in the bias introduced by this data limitation might be possible if effort was made to impute the timing of receipt of incomes of different types across the year. This is of course a challenging task.

Fourthly, a full analysis of the work incentive effects of MI schemes (as explained in section 6) and of the effects of hypothetical reforms (as sketched in section 7) would be a valuable complement to the current analysis. If the size of the unemployment and poverty "traps" could be estimated for all working age people in the EUROMOD database, taking account of the range of individual and household circumstances, this would add considerable richness to the analysis. This is a major exercise that is planned for the future.

Such an exercise would, in particular, allow us to distinguish the differential work incentive effects for various household members (including by gender and age). More generally, the present paper has not attempted to disaggregate the effects within countries by household type or individual characteristics. While such breakdowns would be valuable, perhaps especially within a cross-national context, special attention would need to be paid to the limitations imposed by the sample sizes of some groups of interest, in small countries (or those with small sample sizes) in particular.

Finally, the main aim of this preliminary analysis has been to point out the methodological issues that arise when understanding the role of MI schemes in protecting working age people from poverty. The underlying data and the policy regimes that have been made use of are rather out of date (see table A3). As soon as new releases of EUROMOD are available based on more recent data and policies, the analysis can be revised and relevant policy conclusions drawn.

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# Appendix 1: Additional tables and figures

**Table A1: Minimum Income schemes in 18 EU countries**

| Country | MI scheme | Assessment unit |
|---|---|---|
| BE | Droit a la l'integration sociale | Family |
| DK | Kontanthjælp and starthjælp | Married couple |
| DE | Sozialhilfe | Family |
| EE | Toimetulekutoetus | Household |
| EL | n/a | - - - |
| ES | Renta Mínima de Inserción (regional) | Married couple and children |
| FR | Revenue Minimum Insertion | Family |
| IT | Minimo vitale / reddito minimo (regional) | Houeshold |
| LU | Revenu Minimum Garanti | Household |
| HU | n/a | - - - |
| NL | Algemene Bijstand | Family |
| AT | Sozialhilfe | Family[1] |
| PL | Poloc spoleczna | Household |
| PT | Rendimento social de insercao | Household |
| SI | Denarna socialna pomoč | Household |
| FI | Toimeentulotuki | Family |
| SE | Ekonomiskt bistand | Family |
| UK | Income support | Family |

Notes: [1] In EUROMOD household is used as assessment unit.

Source: MISSOC and EUROMOD country reports: http://www.iser.essex.ac.uk/research/euromod/documentation/country-reports

**Table A2: Details of the Minimum Income Schemes (from the MISSOC tables)**

| | Belgium | Bulgaria | Czech Republic | Denmark | Germany | Estonia | Greece | Spain | France | Ireland |
|---|---|---|---|---|---|---|---|---|---|---|
| **Name of policy** | Droit a la l'integration sociale | Месечна социална помощ | Dávky pomoci v hmotné nouzi | Kontanthjælp Starthjælp | Sozialhilfe | Toimetulekutoetus | n/a | Renta Mínima de Inserción (regional) | Revenue Minimum Insertion | Supplementary welfare allowance |
| **Age** | 18[i] | None | None | 18 | None | None | n/a | 25 to 65[ii] | 25[iii] | 18 |
| **Seeking work** | Yes | Yes[iv] | Yes | Yes[v] | Yes | Yes | n/a | Yes | Yes | Yes |
| **Other conditions** | None | Yes [iii] | None | None | None | None | n/a | None | None | Cannot be in full-time work or education |
| **Disregards** | Earnings | None | None | Some assets, earnings and Invalidity benefit | Basic pension and some earnings | Housing benefit and family allowance[vi] | n/a | None | None | Family benefits and Own home |
| **Assessment unit** | Family | Individual | Family | Individual | Family | Household | n/a | Family | Family | Household |
| **Additional payments** | Family Housing Maintenance | Housing allowance[vii] Heating allowance | Housing allowance Social allowance | Child benefit Settlement Family benefit | Parental allowance | Housing Benefit | n/a | None | Housing benefit supplement | Family allowance |
| **Taxable** | No | No. | | Yes | No | No | n/a | No | No | No |

[i] Unless the applicant is married, pregnant or a parent, in which case they can be younger.
[ii] Those under 25 may be eligible for maintenance or disability based benefits.
[iii] Under 25 only if they are (or are about to become) parents and there are special allowance for people over 65 and those with a disability
[iv] Unless the individual has caring responsibilities, is pregnant, disabled or a full-time daily student. However, individuals are not entitled if they have travelled abroad in the last twelve months, are over 30 and live with their parents if their income exceed the capital limits, those who have fallen foul of particular regulations and tertiary students.
[v] Unless the applicant has a partner who is already working.
[vi] For families with three or more children.
[vii] Individuals who are either orphans under 25, lone parents or 70 and over on low income may be eligible for the housing allowance while others may be eligible for the heating allowance.

**Table A2: continued**

| | Italy | Cyprus | Latvia | Lithuania | Luxembourg | Hungary | Malta | Netherlands |
|---|---|---|---|---|---|---|---|---|
| **Name of policy** | Minimo vitale / reddito minimo (regional) | Public Assistance *(Δημόσιο Βοήθημα)* | Pabalsts garantētā minimālā ienākuma līmeņa nodrošināšanai | Socialinė pašalpa | Revenu Minimum Garanti | n/a | Ghajnuna Socjali | Algemene Bijstand |
| **Age** | No limit | In practice 18 | 25 to 65[viii] | 25[ix] | 25[x] | n/a | 18 | 23[xi] |
| **Seeking work** | Yes | Yes | Yes | Yes | Yes | n/a | Yes | Yes |
| **Other conditions** | None | None | None | None | Not having left work voluntarily | n/a | | None |
| **Disregards** | Family home | Child benefit and<br>Severe disability allowance<br>Some earnings | None | None | Maternity benefits<br>Long term care benefits | n/a | Some child earnings<br>Family benefits<br>Sickness Assistance<br>Milk grant<br>National minimum Pension | Some capital |
| **Assessment unit** | Family | Household | Family | Family | Household | n/a | Household | Family |
| **Additional payments** | Regional variation | Rent allowance<br>Family allowances | None | Housing benefit supplement | Housing benefit<br>Family allowance e | n/a | Family benefits<br>Rent allowance | Family allowance<br>Rent subsidy |
| **Taxable** | No | No | No | No | No | n/a | No | No |

[viii] Those under 25 may be eligible for maintenance or disability based benefits.
[ix] Under 25 only if they are (or are about to become) parents and there are special allowance for people over 65 and those with a disability
[x] Unless applicant is disabled, unable to work or looking after a child.
[xi] For those aged 21 and 22 the municipalities can reduce, for claimants under 21 additional costs such as higher housing costs will have to be paid by their parents

**Table A2: continued**

| | Austria | Poland | Portugal | Romania | Slovenia | Slovakia | Finland | Sweden | UK |
|---|---|---|---|---|---|---|---|---|---|
| **Name of policy** | Sozialhilfe | Poloc spoleczna | Rendimento social de insercao | Ajutor social | Denarna socialna pomoč | Davka v hmonej nudzi | Toimeentulotuki | Ekonomiskt bistand | Income Support |
| **Age** | No age limits | 18 | 18[xii] | 18 | 18 | None | In practice 18 or over | No age limit | 18[xiii] |
| **Seeking work** | Yes | Yes for periodic allowance | Yes | Yes | Yes | Yes | Yes | Yes | Yes for JSA claimants, IS claimants are exempt |
| **Other conditions** | None | None | Be available for training | None | None | None | None | None | None |
| **Disregards** | Care-related benefits<br>Education allowance | None | Some earnings | Complementary family allowance | Scholarships<br>Alimony<br>Special childcare allowance | Some earnings, child benefit and part of pension benefit | Some household income | None | Own home<br>Disability benefits<br>Some earnings |
| **Assessment unit** | Family | Household | Benefit unit | Family | Household | Family | Family | Family | Family |
| **Additional payments** | Family allowance<br>Child benefit<br>Housing benefit | None | Family allowance<br>Housing supplements | Heating allowance | Child benefit<br>Rent subsidy | Housing benefit<br>Child allowance | Family allowance<br>Housing benefit | Housing supplement | Child tax credit<br>Housing benefit<br>Council tax benefit |
| **Taxable** | No | No | No | No | | No | No | No | No |

Source: MISSOC tables XI: 'Guaranteeing Sufficient Resources', http://ec.europa.eu/employment_social/spsi/missoc_tables_en.htm.

[xii] Applicants can be under 18 if they have a dependent child or are married or cohabiting.
[xiii] IS or JSA can be received by applicants age 16 or 17 in exceptional circumstances.

## Table A3: EUROMOD input datasets and simulated tax-benefit systems

| Country | | Dataset | Date of collection | Income reference period | Tax-benefit system | Sample size (households) |
|---|---|---|---|---|---|---|
| BE | Belgium | Panel Survey on Belgian Households | 2002 | annual 2001 | 2003 | 2,975 |
| DK | Denmark | ECHP | 1995 | annual 1994 | 2001 | 3,215 |
| DE | Germany | German Socio-Economic Panel Study | 2002 | annual 2001 | 2003 | 11,303 |
| EE | Estonia | Household Budget Survey | 2005 | monthly 2005 | 2005 | 3,432 |
| EL | Greece | Household Budget Survey | 2004/05 | monthly 2004 | 2005 | 6,555 |
| ES | Spain | EU-SILC | 2005 | annual 2004 | 2005 | 12,937 |
| FR | France | Enquête sur les Budgets Familiaux (EBF) | 2000/01 | annual 2000/01 | 2001 | 10,305 |
| IT | Italy | Italian version of EU-SILC | 2004 | annual 2003 | 2003 | 24,270 |
| LU | Luxembourg | Socio-Economic Panel (PSELL-2) | 2001 | annual 2000 | 2003 | 2,431 |
| HU | Hungary | EU-SILC | 2005 | annual 2004 | 2005 | 6,924 |
| NL | Netherlands | Sociaal-economisch panelonderzoek | 2000 | annual 1999 | 2003 | 4,329 |
| AT | Austria | Austrian version of ECHP | 1998+1999 | annual 1998 | 2003 | 2,674 |
| PL | Poland | Household Budget Survey | 2005 | monthly 2005 | 2005 | 34,692 |
| PT | Portugal | ECHP | 2001 | annual 2000 | 2003 | 4,588 |
| SI | Slovenia | A sub-sample of Population Census merged with administrative records | 2005 (2002) | annual 2004 | 2005 | 4,777 |
| FI | Finland | Income distribution survey | 2001 | annual 2001 | 2003 | 10,736 |
| SE | Sweden | Income distribution survey | 2001 | annual 2001 | 2001 | 14,610 |
| UK | UK | Family Resources Survey (FRS) | 2003/04 | monthly 2003/04 | 2003 | 28,860 |

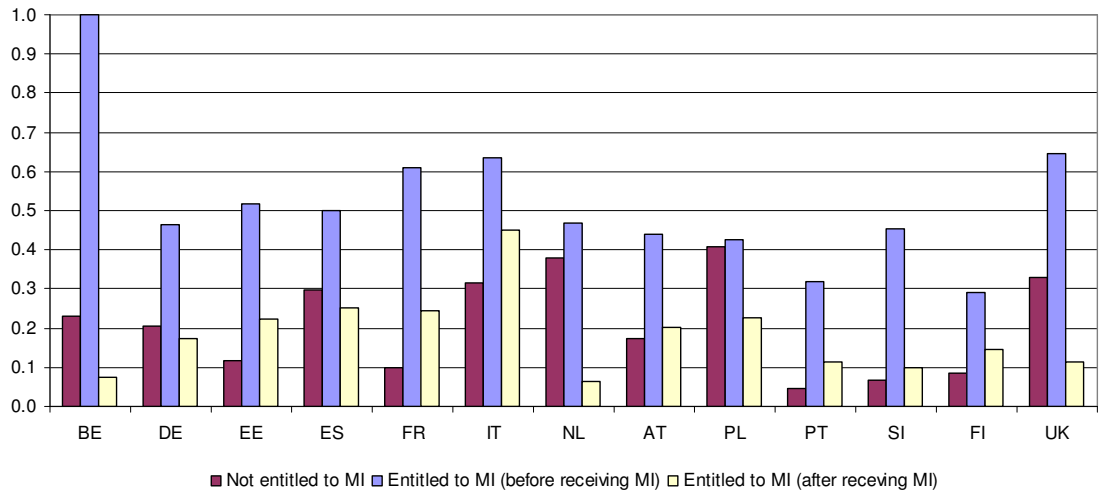
**Acknowledgement:** EUROMOD data sources are the European Community Household Panel (ECHP) User Data Base and the EU Statistics on Incomes and Living Conditions (EU-SILC) made available by Eurostat; the Austrian version of the ECHP made available by the Interdisciplinary Centre for Comparative Research in the Social Sciences; the Panel Survey on Belgian Households (PSBH) made available by the University of Liège and the University of Antwerp; the Estonian Household Budget Survey (HBS) made available by Statistics Estonia; the Income Distribution Survey made available by Statistics Finland; the Enquête sur les Budgets Familiaux (EBF) made available by INSEE; the public-use version of the German Socio-Economic Panel Study (GSOEP) made available by the German Institute for Economic Research (DIW), Berlin; the Greek Household Budget Survey (HBS) made available by the National Statistical Service of Greece; the Italian version of the EU Statistics on Incomes and Living Conditions (EU-SILC made available by ISTAT; the Socio-Economic Panel for Luxembourg (PSELL-2) made available by CEPS/INSTEAD; the Sociaal-economisch panelonderzoek (SEP) made available by Statistics Netherlands through the mediation of the Netherlands Organisation for Scientific Research – Scientific Statistical Agency; the Polish Household Budget Survey (HBS) made available by the Economic Department of Warsaw University; a sub-sample of Population Census merged with Personal income tax database, Pension database and Social transfers database, made available by the Statistical Office of Slovenia; the Income Distribution Survey made available by Statistics Sweden; and the Family Resources Survey (FRS), made available by the UK Department of Work and Pensions (DWP) through the Data Archive. Material from the FRS is Crown Copyright and is used with permission. Neither the DWP nor the Data Archive bears any responsibility for the analysis or interpretation of the data reported here. An equivalent disclaimer applies to all other data sources and their respective providers cited in this acknowledgement.

**Table A4: Maximum level of MI benefit as a percentage of median incomes and minimum wages (2007)**

| | Maximum level of MI benefit for a single person | | |
|---|---|---|---|
| | **€ pcm** | **as % of median income** | **as % of minimum wage** |
| Austria | 421 | 28% | |
| Belgium | 657 | 45% | 52% |
| Bulgaria | 19 | 12% | 21% |
| Cyprus | 519 | 39% | |
| Czech Republic | 109 | 24% | 38% |
| Germany | 677 | 46% | |
| Denmark | n/a | | |
| Estonia | 58 | 16% | 25% |
| Finland | 373 | 24% | |
| France | 441 | 32% | 35% |
| Ireland | 805 | 44% | 57% |
| Lithuania | 53 | 19% | 30% |
| Luxembourg | 1,185 | 48% | 75% |
| Latvia | 39 | 14% | 23% |
| Malta | 359 | 47% | 61% |
| Netherlands | 593 | 39% | 46% |
| Poland | 111 | 38% | 45% |
| Portugal | 177 | 28% | 38% |
| Romania | 31 | 22% | 27% |
| Sweden | 375 | 24% | |
| Slovenia | 206 | 25% | 39% |
| Slovakia | 161 | 49% | 74% |
| United Kingdom | 760 | 44% | 56% |

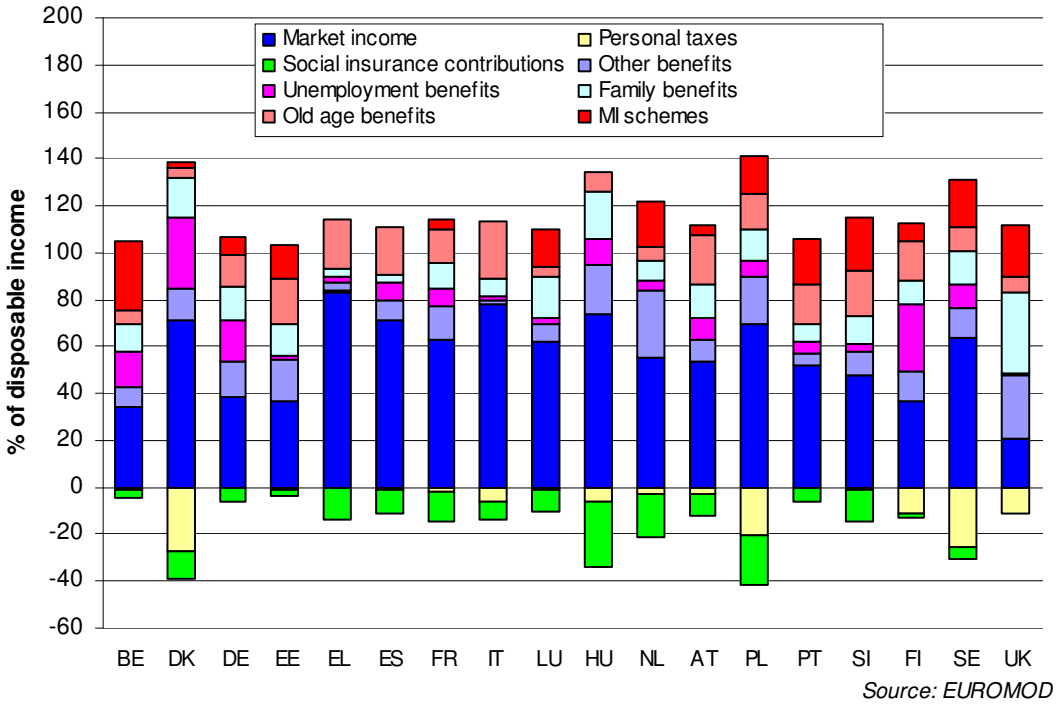
Notes: Minimum income benefit includes family allowances in Belgium, Cyprus, Denmark, Ireland, Luxembourg, and the UK, while it explicitly excludes them in the Netherlands and Sweden. Housing benefits are included in minimum income benefit in Cyprus, Germany, Denmark, and the UK, while they are explicitly excluded in Finland and Sweden. The maximum value of the minimum income benefit varies by region in Austria, Germany and Finland (and also in Italy, where no national minimum income programme exists – as in Spain, Greece and Hungary). The statutory minimum wage may vary by age and sector. Moreover, allowances for seniority and dependent family members apply in several EU countries. No national statutory minimum wage exists in Austria, Cyprus, Germany, Denmark, Finland, Italy and Sweden. Reference year: 2007. Sources: MISSOC for minimum income programmes. Eurostat for median equivalent incomes (DS-071487-table: ilc_li01 - At risk of poverty thresholds) and for statutory minimum wages (DS-071184-table: earn_minw_cur - Monthly minimum wages - Bi-annual data).

**Figure A1: Median poverty gap of working age individuals below the poverty line (at 40 per cent of median) by MI entitlement status (before and after receiving MI)**




Note: Working age individuals on MI are individuals (aged 16 to 64 (inclusive), excluding people in current full-time education), living in assessment unit (see table A1 in appendix 1) entitled to MI. The sample size of working age individuals below the poverty line entitled to MI is small in DK, DE, ES, FR, IT, LU, NL, AT and SE. DK, LU and SE have been dropped while the results should be treated with caution for the remaining countries. Figures refer to various years 2001-05. Source: EUROMOD.

**Figure A2: Detailed components of disposable income of households with working age individuals in the poorest 10 per cent of the population**




Note: Figures refer to various years 2001-05. "Working age" is defined as being aged 16 to 64 (inclusive), excluding people in current full-time education. Decile groups are based on equivalised household disposable income including the whole population. Source: EUROMOD.